

LAND APPLICATION SITE

RICHARD L. DURRER

GRRLD 1 - 15

GREENE COUNTY

**VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION
FORM D: MUNICIPAL EFFLUENT AND BIOSOLIDS**

PART D-VI: LAND APPLICATION AGREEMENT - BIOSOLIDS AND INDUSTRIAL RESIDUALS

A. This land application agreement is made on 10-07-2012 between Richard L. and Marie C. Durrer referred to here as "Landowner", and Recyc Systems, Inc. referred to here as the "Permittee". This agreement remains in effect until it is terminated in writing by either party or, with respect to those parcels that are retained by the Landowner in the event of a sale of one or more parcels, until ownership of all parcels changes. If ownership of individual parcels identified in this agreement changes, those parcels for which ownership has changed will no longer be authorized to receive biosolids or industrial residuals under this agreement.

Landowner:

The Landowner is the owner of record of the real property located in Greene, Virginia, which includes the agricultural, silvicultural or reclamation sites identified below in Table 1 and identified on the tax map(s) attached as Exhibit A.

Table 1.: Parcels authorized to receive biosolids, water treatment residuals or other industrial sludges			
Tax Parcel ID	Tax Parcel ID	Tax Parcel ID	Tax Parcel ID
38-A-112			
38-A-113			
61-A-49			
38-A-114			
38-A-115			

☐ Additional parcels containing Land Application Sites are identified on Supplement A (check if applicable)

Check one:

- ☐ The Landowner is the sole owner of the properties identified herein.
☒ The Landowner is one of multiple owners of the properties identified herein.

In the event that the Landowner sells or transfers all or part of the property to which biosolids have been applied within 38 months of the latest date of biosolids application, the Landowner shall:

1. Notify the purchaser or transferee of the applicable public access and crop management restrictions no later than the date of the property transfer; and
2. Notify the Permittee of the sale within two weeks following property transfer.

The Landowner has no other agreements for land application on the fields identified herein. The Landowner will notify the Permittee immediately if conditions change such that the fields are no longer available to the Permittee for application or any part of this agreement becomes invalid or the information herein contained becomes incorrect.

The Landowner hereby grants permission to the Permittee to land apply residuals as specified below, on the agricultural sites identified above and in Exhibit A. The Landowner also grants permission for DEQ staff to conduct inspections on the land identified above, before, during or after land application of permitted residuals for the purpose of determining compliance with regulatory requirements applicable to such application.

<u>Class B biosolids</u>	<u>Water treatment residuals</u>	<u>Food processing waste</u>	<u>Other industrial sludges</u>
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Richard L. Durrer
Marie C. Durrer
Landowner - Printed Name, Title

Richard L. Durrer
Marie C. Durrer
Signature

P.O. Box 26, Rockwell, VA
Mailing Address & Phone Number

22968

Permittee:

Recyc Systems, Inc., the Permittee, agrees to apply biosolids and/or industrial residuals on the Landowner's land in the manner authorized by the VPA Permit Regulation and in amounts not to exceed the rates identified in the nutrient management plan prepared for each land application field by a person certified in accordance with §10.1-104.2 of the Code of Virginia.

The Permittee agrees to notify the Landowner or the Landowner's designee of the proposed schedule for land application and specifically prior to any particular application to the Landowner's land. Notice shall include the source of residuals to be applied.

☐ I reviewed the document(s) assigning signatory authority to the person signing for landowner above. I will make a copy of this document(s) available to DEQ for review upon request. (Do not check this box if the landowner signs this agreement)

[Signature]
Permittee - Authorized Representative
Printed Name

[Signature]
Signature

PO Box 562 Remington, Virginia 22734
Mailing Address

VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION: PART D-VI LAND APPLICATION AGREEMENT

Permittee: Recyc Systems, Inc County or City: Greene
Landowner: Richard L. and Marie C. Durrer

Landowner Site Management Requirements:

I, the Landowner, I have received a DEQ Biosolids Fact Sheet that includes information regarding regulations governing the land application of biosolids, the components of biosolids and proper handling and land application of biosolids.

I have also been expressly advised by the Permittee that the site management requirements and site access restrictions identified below must be complied with after biosolids have been applied on my property in order to protect public health, and that I am responsible for the implementation of these practices.

I agree to implement the following site management practices at each site under my ownership following the land application of biosolids at the site:

1. Notification Signs: I will not remove any signs posted by the Permittee for the purpose of identifying my field as a biosolids land application site, unless requested by the Permittee, until at least 30 days after land application at that site is completed.
2. Public Access
 - a. Public access to land with a high potential for public exposure shall be restricted for at least one year following any application of biosolids.
 - b. Public access to land with a low potential for public exposure shall be restricted for at least 30 days following any application of biosolids. No biosolids amended soil shall be excavated or removed from the site during this same period of time unless adequate provisions are made to prevent public exposure to soil, dusts or aerosols;
 - c. Turf grown on land where biosolids are applied shall not be harvested for one year after application of biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by DEQ.
3. Crop Restrictions:
 - a. Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after the application of biosolids.
 - b. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after the application of biosolids when the biosolids remain on the land surface for a time period of four (4) or more months prior to incorporation into the soil,
 - c. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months when the biosolids remain on the land surface for a time period of less than four (4) months prior to incorporation.
 - d. Other food crops and fiber crops shall not be harvested for 30 days after the application of biosolids;
 - e. Feed crops shall not be harvested for 30 days after the application of biosolids (60 days if fed to lactating dairy animals).
4. Livestock Access Restrictions:

Following biosolids application to pasture or hayland sites:

 - a. Meat producing livestock shall not be grazed for 30 days,
 - b. Lactating dairy animals shall not be grazed for a minimum of 60 days.
 - c. Other animals shall be restricted from grazing for 30 days;
5. Supplemental commercial fertilizer or manure applications will be coordinated with the biosolids and industrial residuals applications such that the total crop needs for nutrients are not exceeded as identified in the nutrient management plan developed by a person certified in accordance with §10.1-104.2 of the Code of Virginia;
6. Tobacco, because it has been shown to accumulate cadmium, should not be grown on the Landowner's land for three years following the application of biosolids or industrial residuals which bear cadmium equal to or exceeding 0.45 pounds/acre (0.5 kilograms/hectare).

Marie C. Durrer
Landowner's Signature

10-07-2012
Date

Richard L. Durrer
Farm Operator Signature

RR, Box 26 Rockersville, Va.
Mailing Address & Phone Number

434-981-7910

**VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION
FORM D: MUNICIPAL EFFLUENT AND BIOSOLIDS**

PART D-VI: LAND APPLICATION AGREEMENT - BIOSOLIDS AND INDUSTRIAL RESIDUALS

A. This land application agreement is made on 11-9-17 between Virginia Dummer ^{Trustee} referred to here as "Landowner", and Recyc Systems, Inc. referred to here as the "Permittee". This agreement remains in effect until it is terminated in writing by either party or, with respect to those parcels that are retained by the Landowner in the event of a sale of one or more parcels, until ownership of all parcels changes. If ownership of individual parcels identified in this agreement changes, those parcels for which ownership has changed will no longer be authorized to receive biosolids or industrial residuals under this agreement.

Landowner:

The Landowner is the owner of record of the real property located in Greene, Virginia, which includes the agricultural, silvicultural or reclamation sites identified below in Table 1 and identified on the tax map(s) attached as Exhibit A.

Table 1.: Parcels authorized to receive biosolids, water treatment residuals or other industrial sludges

Tax Parcel ID	Tax Parcel ID	Tax Parcel ID	Tax Parcel ID
<u>61-A-6</u>			
<u>61-A-39</u>			

☐ Additional parcels containing Land Application Sites are identified on Supplement A (check if applicable)

Check one:

- ☒ The Landowner is the sole owner of the properties identified herein.
☐ The Landowner is one of multiple owners of the properties identified herein.

In the event that the Landowner sells or transfers all or part of the property to which biosolids have been applied within 38 months of the latest date of biosolids application, the Landowner shall:

1. Notify the purchaser or transferee of the applicable public access and crop management restrictions no later than the date of the property transfer; and
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The Landowner has no other agreements for land application on the fields identified herein. The Landowner will notify the Permittee immediately if conditions change such that the fields are no longer available to the Permittee for application or any part of this agreement becomes invalid or the information herein contained becomes incorrect.

The Landowner hereby grants permission to the Permittee to land apply residuals as specified below, on the agricultural sites identified above and in Exhibit A. The Landowner also grants permission for DEQ staff to conduct inspections on the land identified above, before, during or after land application of permitted residuals for the purpose of determining compliance with regulatory requirements applicable to such application.

<u>Class B biosolids</u>	<u>Water treatment residuals</u>	<u>Food processing waste</u>	<u>Other industrial sludges</u>
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Virginia Dummer
Landowner - Printed Name, Title

Virginia Dummer
Signature

P.O. Box 26
Ruckersville, VA 22968
434-985-2623
Mailing Address & Phone Number

Permittee:

Recyc Systems, Inc., the Permittee, agrees to apply biosolids and/or industrial residuals on the Landowner's land in the manner authorized by the VPA Permit Regulation and in amounts not to exceed the rates identified in the nutrient management plan prepared for each land application field by a person certified in accordance with §10.1-104.2 of the Code of Virginia.

The Permittee agrees to notify the Landowner or the Landowner's designee of the proposed schedule for land application and specifically prior to any particular application to the Landowner's land. Notice shall include the source of residuals to be applied.

☐ I reviewed the document(s) assigning signatory authority to the person signing for landowner above. I will make a copy of this document(s) available to DEQ for review upon request. (Do not check this box if the landowner signs this agreement)

Stankovic
Permittee - Authorized Representative
Printed Name

Stankovic
Signature

PO Box 562 Remington, Virginia 22734
Mailing Address

VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION: PART D-VI LAND APPLICATION AGREEMENT

Permittee: Recyc Systems, Inc County or City: Greene

Landowner: Virginia Durrer Trustee

Landowner Site Management Requirements:

I, the Landowner, I have received a DEQ Biosolids Fact Sheet that includes information regarding regulations governing the land application of biosolids, the components of biosolids and proper handling and land application of biosolids.

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 - c. Other animals shall be restricted from grazing for 30 days;
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6. Tobacco, because it has been shown to accumulate cadmium, should not be grown on the Landowner's land for three years following the application of biosolids or industrial residuals which bear cadmium equal to or exceeding 0.45 pounds/acre (0.5 kilograms/hectare).

Virginia Durrer Trustee
Landowner's Signature

10-9-17
Date

Richard L. Durrer
Farm Operator Signature

P.O. Box 26
Ruckersville, VA 22968
434-981-7910
Mailing Address & Phone Number

FARM DATA SHEET

SITE NAME:	Richard L. Durrer	COUNTY:	Greene
OWNER:	See List Below	OPERATOR:	Richard L. Durrer
OWNER'S	See List Below	OPERATOR'S	P.O. Box 26
ADDRESS:		ADDRESS:	Ruckersville, VA 22968
OWNER'S TELEPHONE:	See List Below	OPERATOR'S TELEPHONE:	434-985-7622
GENERAL FARM TYPE:	Beef Cattle	CELL PHONE:	434-981-7910
# CATTLE:	100	EMAIL:	-
LAGOON or SLURRY:	None	LATITUDE:	Fields 1-3 38.235 Fields 4-11 38.276 Fields 12-15 38.235
TOPO QUAD:	Barboursville Stanardsville	LONGITUDE:	Fields 1-3 78.342 Fields 4-11 78.394 Fields 12-15 78.355
COMMENTS:		METHOD OF DETERMINATION:	Online Maps
Richard L. and Marie C. Durrer 38-A-112, 38-A-113, 38-A-114, 38-A-115, 61-A-49 Fields 2-11 P.O. Box 26 Ruckersville, VA 22968 434-985-7622		Ellis L and Virginia H. Durrer Trustees of the Ellis L. Durrer and Virginia H. Durrer Joint Rev Trust 61-A-6, 61-A-39 Fields 1-2, 12-15 P.O. Box 26 Ruckersville, VA 22968 434-985-2623	

Ellis L. Durrer is now deceased.

BB

10-30-17

FIELD CHANGES
RICHARD L. DURRER
GREENE CO.

**OLD FIELD 4 IS REPLACED BY A NEW FIELD 4. OLD FIELD 4 IS
NOW VERY GROWN UP; NEW FIELD 4 WAS RECENTLY
PURCHASED BY THE DURRER FAMILY.**

**OLD FIELD 15 AND 16 ARE NOW COMBINED AS ONE FIELD,
FIELD 15.**

10-30-17

FIELD DATA SHEET

Field Identification	Gross Acres	Environmentally Sensitive Soils				Hydro Map	Tax Map #	FSA Tract #
		Water Table	Bed Rock/Shallow	Surf/Leach	Freq Flood			
GRRLD 1	18.2	CgB Dec.-May	HxD	HxD	-	RA 26	61-A-39	T 326 F 1
GRRLD 2	18.3	CgB Dec.-May	-	-	-	RA 26	61-A-6 61-A-49	T 323 F 5
GRRLD 3	19.6	CgB Dec.-May	-	-	-	RA 26	61-A-49	T 323 F 1, 2, 4
GRRLD 4N	3.0	-	-	-	-	RA 26	38-A-114 38-A-115	T None F None
GRRLD 5	17.9	Hb Oct.-May	-	Hb	Hb Oct.-May	RA 26	38-A-113	T 440 F 5, 6
GRRLD 6	15.3	Hb Oct.-May	-	Hb	Hb Oct.-May	RA 26	38-A-113	T 440 F 7
GRRLD 7	16.3	Hb Oct.-May	AsC	AsC, Hb	Hb Oct.-May	RA 26	38-A-112 38-A-113	T 440 T 8, 9 T 439 T 2
GRRLD 8	18.1	Hb Oct.-May	-	Hb	Hb Oct.-May	RA 26	38-A-113	T 440 F 3
GRRLD 9	13.9	Hb Oct.-May	-	Hb	Hb Oct.-May	RA 26	38-A-113	T 440 F 4
GRRLD 10	23.8	Hb Oct.-May	-	Hb	Hb Oct.-May	RA 26	38-A-113	T 440 F 1, 2

Field Identification	Gross Acres	Environmentally Sensitive Soils				Hydro Map	Tax Map #	FSA Tract #
		Water Table	Bed Rock/Shallow	Surf/ Leach	Freq Flood			
GRRLD 11	10.1	Hb Oct.-May	-	Hb	Hb Oct.-May	RA 26	38-A-112	T 439 F 1
GRRLD 12	23.5	CgB Dec.-May	-	-	-	RA 26	61-A-6	T 368 F 3, 6, 7, 9
GRRLD 13	6.1	CgB Dec.-May	-	-	-	RA 26	61-A-6	T 368 F 8
GRRLD 14	14.7	CgB Dec.-May Sc Nov.-Apr.	-	-	Sc Dec.-May	RA 26	61-A-6	T 368 F 5
GRRLD 15	27.7	CgB Dec.-May	-	-	-	RA 26	61-A-6	T 368 F 1, 2
TOTAL ACRES IN SITE	246.5							

[illegible]

Report Number: 17-262-0640

Account Number: 70594



7621 Whitepine Road, Richmond, VA 23237

Main 804-743-9401 • Fax 804-271-6446

www.waypointanalytical.com

Send To: Recyc Systems Inc
Susan Trumbo
8455 Whiteshop Road
Culpepper VA 22701

"Every acre...Every year."™

Grower: Richard Durrer
Greene Co

SOIL ANALYSIS REPORT

Analytical Method(s): SMP Buffer pH Mehlich 3 Loss On Ignition Water pH

Date Received: 09/19/2017

Date Of Analysis: 09/20/2017

Date Of Report: 09/20/2017

Sample ID Field ID	Lab Number	OM	W/V	ENR	Phosphorus				Potassium	Magnesium	Calcium	Sodium	pH		Acidity	C.E.C
		% Rate	Soil Class	lbs/A	M3 ppm Rate	ppm Rate	ppm Rate	K ppm Rate	Mg ppm Rate	Ca ppm Rate	Na ppm Rate	Soil pH	Buffer Index	H meq/100g	meq/100g	
2	00734	4.0 M		114	151 VH			40 VL	100 L	2009 VH		7.0		0.0	11.0	
3	00735	6.6 H		150	112 VH			118 M	150 M	1549 H		6.4	6.84	0.9	10.2	
4	00736	4.8 M		136	87 H			70 L	86 M	1022 H		6.0	6.82	1.1	7.1	
14	00737	5.0 H		136	102 VH			42 VL	109 L	1671 H		6.6	6.87	0.6	10.0	

Sample ID Field ID	Percent Base Saturation					Nitrate	Sulfur	Zinc	Manganese	Iron	Copper	Boron	Soluble Salts		
	K %	Mg %	Ca %	Na %	H %	NO ₃ N ppm Rate	S ppm Rate	Zn ppm Rate	Mn ppm Rate	Fe ppm Rate	Cu ppm Rate	B ppm Rate	SS ms/cm Rate		
2	0.9	7.6	91.3		0.0			5.2 H	22 H						
3	3.0	12.3	75.9		8.8			5.7 H	35 H						
4	2.5	10.1	72.0		15.5			4.9 H	16 M						
14	1.1	9.1	83.6		6.0			7.0 H	18 M						

Values on this report represent the plant available nutrients in the soil. Rating after each value: VL (Very Low), L (Low), M (Medium), H (High), VH (Very High). ENR - Estimated Nitrogen Release. C.E.C. - Cation Exchange Capacity.

Explanation of symbols: % (percent), ppm (parts per million), lbs/A (pounds per acre), ms/cm (milli-mhos per centimeter), meq/100g (milli-equivalent per 100 grams). Conversions: ppm x 2 = lbs/A, Soluble Salts ms/cm x 640 = ppm.

This report applies to sample(s) tested. Samples are retained a maximum of thirty days after testing.

Analysis prepared by: Waypoint Analytical Virginia, Inc.

by: *Pauric McGeary*

Pauric McGeary

Report Number: 17-262-0640

Account Number: 70594



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Send To: Recyc Systems Inc
Susan Trumbo
8455 Whiteshop Road
Culpepper VA 22701

"Every acre...Every year."™

Grower: Richard Durrer
Greene Co

Date Received: 09/19/2017

Date Of Report: 09/20/2017

SOIL FERTILITY RECOMMENDATIONS

Sample ID Field ID	Intended Crop	Yield Goal	Lime Tons/A	Nitrogen N lb/A	Phosphate P ₂ O ₅ lb/A	Potash K ₂ O lb/A	Magnesium Mg lb/A	Sulfur S lb/A	Zinc Zn lb/A	Manganese Mn lb/A	Iron Fe lb/A	Copper Cu lb/A	Boron B lb/A
2	Adjust pH to 6.8	0	0.0				0			0			
3	Adjust pH to 6.8	0	1.0				0			0			
4	Adjust pH to 6.8	0	1.3				0			2			
14	Adjust pH to 6.8	0	1.0				0			2			

Comments:

Sample(s) : 4,14 Crop: Adjust pH to 6.8

Apply dolomitic lime to raise pH and improve the magnesium level.

"The recommendations are based on research data and experience, but NO GUARANTEE or WARRANTY expressed or implied, concerning crop performance is made."

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Pauric McGeary

Report Number: 17-261-0551

Account Number: 70594



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Grower: Richard Durrer
Greene Co

SOIL ANALYSIS REPORT

Analytical Method(s): SMP Buffer pH Mehlich 3 Loss On Ignition Water pH

Date Received: 09/18/2017

Date Of Analysis: 09/19/2017

Date Of Report: 09/19/2017

Sample ID Field ID	Lab Number	OM	W/V	ENR	Phosphorus				Potassium	Magnesium	Calcium	Sodium	pH		Acidity	C.E.C			
		% Rate	Soil Class	lbs/A	M3 ppm	Rate	ppm	Rate	K ppm	Rate	Mg ppm	Rate	Ca ppm	Rate	Na ppm	Rate	Soil pH	Buffer Index	H meq/100g
5	25955	6.4 H		150	124	VH			36	VL	92	L	1669	VH		6.6	6.87	0.6	9.8
6	25956	6.9 H		150	97	H			38	VL	134	M	1741	VH		6.8		0.3	10.2
7	25957	7.3 VH		150	67	H			125	M	177	M	1568	H		6.4	6.84	0.9	10.5
8	25958	8.9 VH		150	71	H			242	VH	176	M	1793	H		6.5	6.84	0.9	12.0
9	25960	6.7 H		150	104	VH			176	H	137	M	1751	H		6.6	6.86	0.7	11.0

Sample ID Field ID	Percent Base Saturation					Nitrate	Sulfur	Zinc	Manganese	Iron	Copper	Boron	Soluble Salts			
	K %	Mg %	Ca %	Na %	H %	NO ₃ N ppm Rate	S ppm Rate	Zn ppm Rate	Mn ppm Rate	Fe ppm Rate	Cu ppm Rate	B ppm Rate	SS ms/cm Rate			
5	0.9	7.8	85.2		6.1			5.8 H	36 H							
6	1.0	10.9	85.3		2.9			8.5 VH	33 H							
7	3.1	14.0	74.7		8.6			7.8 H	28 H							
8	5.2	12.2	74.7		7.5			6.0 H	34 H							
9	4.1	10.4	79.6		6.4			6.9 H	97 VH							

Values on this report represent the plant available nutrients in the soil. Rating after each value: VL (Very Low), L (Low), M (Medium), H (High), VH (Very High). ENR - Estimated Nitrogen Release. C.E.C. - Cation Exchange Capacity.

Explanation of symbols: % (percent), ppm (parts per million), lbs/A (pounds per acre), ms/cm (milli-mhos per centimeter), meq/100g (milli-equivalent per 100 grams). Conversions: ppm x 2 = lbs/A, Soluble Salts ms/cm x 640 = ppm.

This report applies to sample(s) tested. Samples are retained a maximum of thirty days after testing.

Analysis prepared by: Waypoint Analytical Virginia, Inc.

by: *Paucic McGeary*

Paucic McGeary

Report Number: 17-261-0551

Account Number: 70594



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5	Adjust pH to 6.8	0	1.0				0			0			
6	Adjust pH to 6.8	0	0.0				0			0			
7	Adjust pH to 6.8	0	1.0				0			0			
8	Adjust pH to 6.8	0	1.0				0			0			
9	Adjust pH to 6.8	0	1.0				0			0			

Comments:

"The recommendations are based on research data and experience, but NO GUARANTEE or WARRANTY expressed or implied, concerning crop performance is made."

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Paucic McGroary

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Account Number: 70594



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www.waypointanalytical.com

Send To: Recyc Systems Inc
Susan Trumbo
8455 Whiteshop Road
Culpepper VA 22701

"Every acre...Every year."™

Grower: Richard Durrer
Greene Co

SOIL ANALYSIS REPORT

Analytical Method(s): SMP Buffer pH Mehlich 3 Loss On Ignition Water pH

Date Received: 09/18/2017

Date Of Analysis: 09/19/2017

Date Of Report: 09/19/2017

Sample ID Field ID	Lab Number	OM	W/V	ENR	Phosphorus			Potassium	Magnesium	Calcium	Sodium	pH		Acidity	C.E.C
		% Rate	Soil Class	lbs/A	M3 ppm Rate	ppm Rate	ppm Rate	K ppm Rate	Mg ppm Rate	Ca ppm Rate	Na ppm Rate	Soil pH	Buffer Index	H meq/100g	meq/100g
10	25961	4.9 M		137	104 VH			42 VL	80 L	1190 H		6.3	6.85	0.8	7.5
11	25962	6.4 H		150	87 H			45 VL	100 L	1344 H		6.4	6.85	0.8	8.5

Sample ID Field ID	Percent Base Saturation					Nitrate	Sulfur	Zinc	Manganese	Iron	Copper	Boron	Soluble Salts		
	K %	Mg %	Ca %	Na %	H %	NO ₃ N ppm Rate	S ppm Rate	Zn ppm Rate	Mn ppm Rate	Fe ppm Rate	Cu ppm Rate	B ppm Rate	SS ms/cm Rate		
10	1.4	8.9	79.3		10.7			4.4 H	54 VH						
11	1.4	9.8	79.1		9.4			5.6 H	40 H						

Values on this report represent the plant available nutrients in the soil. Rating after each value: VL (Very Low), L (Low), M (Medium), H (High), VH (Very High). ENR - Estimated Nitrogen Release. C.E.C. - Cation Exchange Capacity.

Explanation of symbols: % (percent), ppm (parts per million), lbs/A (pounds per acre), ms/cm (milli-mhos per centimeter), meq/100g (milli-equivalent per 100 grams). Conversions: ppm x 2 = lbs/A, Soluble Salts ms/cm x 640 = ppm.

This report applies to sample(s) tested. Samples are retained a maximum of thirty days after testing.

Analysis prepared by: Waypoint Analytical Virginia, Inc.

by: *Paucic McGeary*

Paucic McGroary

Report Number: 17-261-0551

Account Number: 70594



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Grower: Richard Durrer
Greene Co

Date Received: 09/18/2017

Date Of Report: 09/19/2017

SOIL FERTILITY RECOMMENDATIONS

Sample ID Field ID	Intended Crop	Yield Goal	Lime Tons/A	Nitrogen N lb/A	Phosphate P ₂ O ₅ lb/A	Potash K ₂ O lb/A	Magnesium Mg lb/A	Sulfur S lb/A	Zinc Zn lb/A	Manganese Mn lb/A	Iron Fe lb/A	Copper Cu lb/A	Boron B lb/A
10	Adjust pH to 6.8	0	1.0				0			0			
11	Adjust pH to 6.8	0	1.0				0			0			

Comments:**Sample(s) : 11 Crop: Adjust pH to 6.8**

Apply dolomitic lime to raise pH and improve the magnesium level.

"The recommendations are based on research data and experience, but NO GUARANTEE or WARRANTY expressed or implied, concerning crop performance is made."

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Pauric McGroary

Report Number: 17-244-0546

Account Number: 70594



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Grower: Richard L Durrer
Greene Co.

SOIL ANALYSIS REPORT

Analytical Method(s): SMP Buffer pH Mehlich 3 Loss On Ignition Water pH

Date Received: 09/01/2017

Date Of Analysis: 09/05/2017

Date Of Report: 09/05/2017

Sample ID Field ID	Lab Number	OM	W/V	ENR	Phosphorus				Potassium	Magnesium	Calcium	Sodium	pH		Acidity	C.E.C
		% Rate	Soil Class	lbs/A	M3 ppm Rate	ppm Rate	ppm Rate	K ppm Rate	Mg ppm Rate	Ca ppm Rate	Na ppm Rate	Soil pH	Buffer Index	H meq/100g	meq/100g	
1	21908	5.8 H		150	81 H			90 L	139 M	1936 VH		6.9		0.2	11.3	
12	21910	4.8 M		132	71 H			148 H	181 H	1475 H		6.5	6.86	0.7	10.0	
13	21911	5.0 H		138	60 H			107 M	131 M	1226 H		6.3	6.84	0.9	8.4	
15	21912	6.3 H		150	97 H			190 VH	181 H	1271 M		6.2	6.81	1.2	9.6	
15	21913	5.5 H		145	102 VH			108 M	138 M	1738 VH		6.9		0.1	10.2	

Sample ID Field ID	Percent Base Saturation					Nitrate	Sulfur	Zinc	Manganese	Iron	Copper	Boron	Soluble Salts		
	K %	Mg %	Ca %	Na %	H %	NO ₃ N ppm Rate	S ppm Rate	Zn ppm Rate	Mn ppm Rate	Fe ppm Rate	Cu ppm Rate	B ppm Rate	SS ms/cm Rate		
1	2.0	10.3	85.7		1.8			5.5 H	24 H						
12	3.8	15.1	73.8		7.0			4.2 H	30 H						
13	3.3	13.0	73.0		10.7			3.8 H	22 H						
15	5.1	15.7	66.2		12.5			4.8 H	17 M						
15	2.7	11.3	85.2		1.0			5.4 H	29 H						

Values on this report represent the plant available nutrients in the soil. Rating after each value: VL (Very Low), L (Low), M (Medium), H (High), VH (Very High). ENR - Estimated Nitrogen Release. C.E.C. - Cation Exchange Capacity.

Explanation of symbols: % (percent), ppm (parts per million), lbs/A (pounds per acre), ms/cm (milli-mhos per centimeter), meq/100g (milli-equivalent per 100 grams). Conversions: ppm x 2 = lbs/A, Soluble Salts ms/cm x 640 = ppm.

This report applies to sample(s) tested. Samples are retained a maximum of thirty days after testing.

Analysis prepared by: Waypoint Analytical Virginia, Inc.

by: *Paucic McGroary*

Paucic McGroary

Report Number: 17-244-0546

Account Number: 70594



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Grower: Richard L Durrer
Greene Co.

Date Received: 09/01/2017

Date Of Report: 09/05/2017

SOIL FERTILITY RECOMMENDATIONS

Sample ID Field ID	Intended Crop	Yield Goal	Lime Tons/A	Nitrogen N lb/A	Phosphate P ₂ O ₅ lb/A	Potash K ₂ O lb/A	Magnesium Mg lb/A	Sulfur S lb/A	Zinc Zn lb/A	Manganese Mn lb/A	Iron Fe lb/A	Copper Cu lb/A	Boron B lb/A
1	Adjust pH to 6.8	0	0.0				0			0			
12	Adjust pH to 6.8	0	1.0				0			0			
13	Adjust pH to 6.8	0	1.0				0			0			
15	Adjust pH to 6.8	0	1.3				0			2			
15	Adjust pH to 6.8	0	0.0				0			0			

Comments:

"The recommendations are based on research data and experience, but NO GUARANTEE or WARRANTY expressed or implied, concerning crop performance is made."

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Paucic McGroary

Report Number: 15-296-0723

Account Number: 70594



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Grower: RICHARD DURRER
GREENE CO
GRRRLD

SOIL ANALYSIS REPORT

Analytical Method(s):

Mehlich 3

Date Received: 10/23/2015

Date Of Analysis: 10/26/2015

Date Of Report: 10/26/2015

Sample ID Field ID	Lab Number	OM	W/V	ENR	Phosphorus		Potassium		Magnesium		Calcium		Sodium		pH		Acidity	C.E.C
		% Rate	Soil Class	lbs/A	Mehlich 3 ppm	Reserve Rate	K ppm	Rate	Mg ppm	Rate	Ca ppm	Rate	Na ppm	Rate	Soil pH	Buffer Index	H meq/100g	meq/100g
3	01717	3.9 M		114	116	VH	228	VH	132	M	1509	H			6.8		0.3	9.5
4	01718	3.7 M		115	59	H	281	VH	108	M	593	L			5.5	6.77	1.6	6.2
10	01719	6.4 H		150	94	H	144	M	152	M	1965	H			6.8		0.3	11.8
11	01720	4.2 M		124	42	M	144	H	125	H	659	L			5.3	6.72	2.1	6.8

Sample ID Field ID	Percent Base Saturation					Nitrate	Sulfur	Zinc	Manganese	Iron	Copper	Boron	Soluble Salts	Chloride	Aluminum
	K %	Mg %	Ca %	Na %	H %	NO ₃ N ppm	S ppm	Zn ppm	Mn ppm	Fe ppm	Cu ppm	B ppm	SS ms/cm	Cl ppm	Al ppm
3	6.2	11.6	79.4		2.9			5.3	H	36	H				
4	11.6	14.5	47.8		25.7			3.1	M	89	VH				
10	3.1	10.7	83.3		2.9			6.5	H	51	VH				
11	5.4	15.3	48.5		31.1			3.6	H	27	H				

Values on this report represent the plant available nutrients in the soil. Rating after each value: VL (Very Low), L (Low), M (Medium), H (High), VH (Very High). ENR - Estimated Nitrogen Release. C.E.C. - Cation Exchange Capacity.

Explanation of symbols: % (percent), ppm (parts per million), lbs/A (pounds per acre), ms/cm (milli-mhos per centimeter), meq/100g (milli-equivalent per 100 grams). Conversions: ppm x 2 = lbs/A, Soluble Salts ms/cm x 640 = ppm.

This report applies to sample(s) tested. Samples are retained a maximum of thirty days after testing.

Analysis prepared by: Waypoint Analytical Virginia, Inc.

by: *Paucic McGroary*

Paucic McGroary

Report Number: 15-296-0723

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Grower: RICHARD DURRER
GREENE CO
GRRLD

Date Received: 10/23/2015

Date Of Report: 10/26/2015

SOIL FERTILITY RECOMMENDATIONS

Sample ID Field ID	Intended Crop	Yield Goal	Lime Tons/A	Nitrogen N lb/A	Phosphate P ₂ O ₅ lb/A	Potash K ₂ O lb/A	Magnesium Mg lb/A	Sulfur S lb/A	Zinc Zn lb/A	Manganese Mn lb/A	Iron Fe lb/A	Copper Cu lb/A	Boron B lb/A
3	Adjust pH to 6.8	0	0.0				0			0			
4	Adjust pH to 6.8	0	2.0				0			0			
10	Adjust pH to 6.8	0	0.0				0			0			
11	Adjust pH to 6.8	0	2.3				0			0			

Comments:**Sample(s) : 4 Crop: Adjust pH to 6.8**

Apply dolomitic lime to raise pH and improve the magnesium level.

"The recommendations are based on research data and experience, but NO GUARANTEE or WARRANTY expressed or implied, concerning crop performance is made."

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Paucic McGroary

THE PLANNER IS NOT STATE CERTIFIED

Nutrient Management Plan Balance Sheet
(Fall, 2017-Winter, 2019)
Richard L. Durrer
Planner: John Doe

Tract: 323

Location: Greene

(N = N based, 1P = P based, 1.5P = P based at 1.5 removal, 0P = No P allowed)

Field CFSA No. /Name	Size (ac) Total/ Used	Yr.	Crop	Needs N-P-K (lbs/ac)	Leg /Man Resid	Manure/Biosld Rate & Type (season)	IT (d)	Man/Bios N-P-K (lbs/ac)	Net = Needs - appld N-P-K (lbs/ac)	Sum P rem cred	Commercial N-P-K (lbs/ac)	Notes	
5/GRRLD 2(1P)	18/18	2017	Fescue grass hay mt.	90-0-200	0/0				90-0-200	50			
1, 2, 4/GRRLD 3(N)	19/19	2017	Hay/Pasture	100-40-85	0/0				100-40-85	N/A			

Commercial Application Methods:

br - Broadcast ba - Banded sd - Sidedress

Notes:

Tract: 326

Location: Greene

(N = N based, 1P = P based, 1.5P = P based at 1.5 removal, 0P = No P allowed)

Field CFSA No. /Name	Size (ac) Total/ Used	Yr.	Crop	Needs N-P-K (lbs/ac)	Leg /Man Resid	Manure/Biosld Rate & Type (season)	IT (d)	Man/Bios N-P-K (lbs/ac)	Net = Needs - appld N-P-K (lbs/ac)	Sum P rem cred	Commercial N-P-K (lbs/ac)	Notes	
1/GRRRLD 1(N)	18/18	2017	Hay/Pasture	100-40-95	0/0				100-40-95	N/A			

Commercial Application Methods:

br - Broadcast ba - Banded sd - Sidedress

Notes:

Tract: 368

Location: Greene

(N = N based, 1P = P based, 1.5P = P based at 1.5 removal, 0P = No P allowed)

Field CFSA No. /Name	Size (ac) Total/ Used	Yr.	Crop	Needs N-P-K (lbs/ac)	Leg /Man Resid	Manure/Biosld Rate & Type (season)	IT (d)	Man/Bios N-P-K (lbs/ac)	Net = Needs - applied N-P-K (lbs/ac)	Sum P rem cred	Commercial N-P-K (lbs/ac)	Notes	
3, 6, 7, 9/GRRLD 12(N)	23/23	2017	Grass Pasture	50-0-0	0/0				50-0-0	N/A			
8/GRRLD 13(N)	6/6	2017	Grass Pasture	50-0-30	0/0				50-0-30	N/A			
5/GRRLD 14(N)	15/15	2017	Fescue grass hay mt.	90-40-200	0/0				90-40-200	N/A			
1, 2/GRRLD 15(N)	28/28	2017	Grass Pasture	50-0-0	0/0				50-0-0	N/A			

Commercial Application Methods:

br - Broadcast ba - Banded sd - Sidedress

Notes:

Tract: 439 Location: Greene

(N = N based, 1P = P based, 1.5P = P based at 1.5 removal, 0P = No P allowed)

Field CFSA No. /Name	Size (ac) Total/ Used	Yr.	Crop	Needs N-P-K (lbs/ac)	Leg /Man Resid	Manure/Biosld Rate & Type (season)	IT (d)	Man/Bios N-P-K (lbs/ac)	Net = Needs - appld N-P-K (lbs/ac)	Sum P rem cred	Commercial N-P-K (lbs/ac)	Notes	
1/GRRLD 11(N)	10/10	2017	Grass Pasture	50-0-60	0/0				50-0-60	N/A			

Commercial Application Methods:

br - Broadcast ba - Banded sd - Sidedress

Notes:

Tract: 440

Location: Greene

(N = N based, 1P = P based, 1.5P = P based at 1.5 removal, 0P = No P allowed)

Field CFSA No. /Name	Size (ac) Total/ Used	Yr.	Crop	Needs N-P-K (lbs/ac)	Leg /Man Resid	Manure/Biosld Rate & Type (season)	IT (d)	Man/Bios N-P-K (lbs/ac)	Net = Needs - appld N-P-K (lbs/ac)	Sum P rem cred	Commercial N-P-K (lbs/ac)	Notes	
5, 6/GRRLD 5(N)	17/17	2017	Fescue grass hay mt.	70-40-130	0/0				70-40-130	N/A			
7/GRRLD 6(N)	16/16	2017	Fescue grass hay mt.	70-40-130	0/0				70-40-130	N/A			
8, 9/GRRLD 7(N)	12/12	2017	Grass Pasture	50-0-0	0/0				50-0-0	N/A			
3/GRRLD 8(N)	17/17	2017	Grass Pasture	50-0-0	0/0				50-0-0	N/A			
4/GRRLD 9(N)	15/15	2017	Hay/Pasture	100-40-55	0/0				100-40-55	N/A			
1, 2/GRRLD 10(N)	23/23	2017	Hay/Pasture	100-40-120	0/0				100-40-120	N/A			

Commercial Application Methods:

br - Broadcast ba - Banded sd - Sidedress

Notes:

Tract: None Location: Greene

(N = N based, 1P = P based, 1.5P = P based at 1.5 removal, 0P = No P allowed)

Field CFSA No. /Name	Size (ac) Total/ Used	Yr.	Crop	Needs N-P-K (lbs/ac)	Leg /Man Resid	Manure/Biosld Rate & Type (season)	IT (d)	Man/Bios N-P-K (lbs/ac)	Net = Needs - appld N-P-K (lbs/ac)	Sum P rem cred	Commercial N-P-K (lbs/ac)	Notes	
None/GRRRLD 4(N)	3/3	2017	Fescue grass hay mt.	90-50-185	0/0				90-50-185	N/A			

Commercial Application Methods:

br - Broadcast ba - Banded sd - Sidedress

Notes:

Soil Test Summary

Tract	Field	Acre	Date	P2O5	K2O	Lab	Soil pH	Lime Date	rec. lime tons/Ac
323	GRRLD 2	18	2017-Fa	VH (151 P ppm)	L+ (40 K ppm)	A&L MIII	7.		
323	GRRLD 3	19	2017-Fa	H+ (112 P ppm)	M+ (118 K ppm)	A&L MIII	6.4		
326	GRRLD 1	18	2017-Fa	H (81 P ppm)	M (90 K ppm)	A&L MIII	6.9		
368	GRRLD 12	23	2017-Fa	H (71 P ppm)	H (148 K ppm)	A&L MIII	6.5		
368	GRRLD 13	6	2017-Fa	H- (60 P ppm)	M+ (107 K ppm)	A&L MIII	6.3		
368	GRRLD 14	15	2017-Fa	H+ (102 P ppm)	L+ (42 K ppm)	A&L MIII	6.6		
368	GRRLD 15	28	2017-Fa	H (97 P ppm)	H (190 K ppm)	A&L MIII	6.2		
439	GRRLD 11	10	2017-Fa	H (87 P ppm)	L+ (45 K ppm)	A&L MIII	6.4		
440	GRRLD 5	17	2017-Fa	H+ (124 P ppm)	L (36 K ppm)	A&L MIII	6.6		
440	GRRLD 6	16	2017-Fa	H (97 P ppm)	L (38 K ppm)	A&L MIII	6.8		
440	GRRLD 7	12	2017-Fa	H- (67 P ppm)	H- (125 K ppm)	A&L MIII	6.4		
440	GRRLD 8	17	2017-Fa	H (71 P ppm)	VH (242 K ppm)	A&L MIII	6.5		
440	GRRLD 9	15	2017-Fa	H+ (104 P ppm)	H (176 K ppm)	A&L MIII	6.6		
440	GRRLD 10	23	2017-Fa	H+ (104 P ppm)	L+ (42 K ppm)	A&L MIII	6.3		
None	GRRLD 4	3	2017-Fa	H (87 P ppm)	M- (70 K ppm)	A&L MIII	6.		

Field Productivities for Major Crops

Tract Name	Tract/ Field	Field Name	Acres	Predominant Soil Series	Corn	Small Grain	Alfalfa	Grass Hay	Environmental Warnings
323	323/5	GRRLD 2	18	Elioak	IVb	III	III	III	High Slope
	323/1, 2, 4	GRRLD 3*	19	Elioak	V	IV	III	IV	
326	326/1	GRRLD 1*	18	Elioak	V	IV	III	IV	Shallow soil, High Slope
368	368/3, 6, 7,	GRRLD 12	23	Elioak	IVb	III	III	III	
	368/8	GRRLD 13	6	Elioak	IVb	III	III	IV	
	368/5	GRRLD 14	15	Elioak	IVa	II	III	II	
	368/1, 2	GRRLD 15	28	Elioak	IVb	III	III	III	
439	439/1	GRRLD 11	10	Elioak	IVb	III	III	III	
440	440/5, 6	GRRLD 5	17	Elioak	IVb	III	III	III	
	440/7	GRRLD 6	16	Elioak	IVb	III	III	III	
	440/8, 9	GRRLD 7	12	Elioak	IVb	III	III	III	
	440/3	GRRLD 8	17	Elioak	IVb	III	III	IV	
	440/4	GRRLD 9	15	Dyke	IVa	III	III	IV	
	440/1, 2	GRRLD 10	23	Dyke	IVa	III	III	III	
None	None/None	GRRLD 4	3	Elioak	IVa	II	III	II	

* Do not apply manure or biosolids more than 30 days prior to planting. Apply commercial fertilizer nitrogen to row crops in split spring applications.

Yield Range

Field Productivity Group	Corn Grain Bu/Acre	Barley/Intensive Wheat Bu/Acre	Std. Wheat Bu/Acre	Alfalfa Tons/Acre	Grass/Hay Tons/Acre
I	>170	>80	>64	>6	>4.0
II	150-170	70-80	56-64	4-6	3.5-4.0
III	130-150	60-70	48-56	<4	3.0-3.5
IV	100-130	50-60	40-48	NA	<3.0
V	<100	<50	<40	NA	NA

Farm Summary Report

Plan: **New Plan** **Fall, 2017 - Winter, 2019**

Farm Name: **Richard L. Durrer**

Location: Greene

Specialist: John Doe

N-based Acres: 221.5

P-based Acres: 18.3

Tract Name: **323**

FSA Number: 323

Location: Greene

Field Name: **GRRLD 2**

Total Acres: 18.30 Usable Acres: 18.30

FSA Number: 5

Tract: 323

Location: Greene

Slope Class: C Hydrologic Group: D

Riparian buffer width: 0 ft

Distance to stream: 0 ft

Conservation Practices:

Pasture (>75% cover)

P-Index Summary

P-based(1.0)

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K		Lat
Fa-2017	7.0	VH(151 P ppm)	L+(40 K ppm)	A&L MIII	

Soils:

PERCENT	SYMBOL	SOIL SERIES
---------	--------	-------------

2	CgB	Chatuge
20	EIB	Elioak
69	EIC	Elioak
9	GID	Glenelg

Field Warnings:

Field Name: GRRLD 3

Total Acres: 19.00 Usable Acres: 19.00

FSA Number: 1, 2, 4

Tract: 323

Location: Greene

Slope Class: C Hydrologic Group: C

Riparian buffer width: 0 ft

Distance to stream: 0 ft

Conservation Practices:

Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K		Lab
Fa-2017	6.4	H+(112 P ppm)	M+(118 K ppm)	A&L MIII	

Soils:

PERCENT	SYMBOL	SOIL SERIES
8	CgB	Chatuge
54	EIC	Elioak
9	EnD3	Elioak
5	GIC	Glenelg
25	GID	Glenelg

Field Warnings:

Environmentally Sensitive Soils due to:

Soils with parent slope in excess of 15%

Tract Name: 326

FSA Number: 326

Location: Greene

Field Name: GRRLD 1

Total Acres: 18.00 Usable Acres: 18.00

FSA Number: 1

Tract: 326

Location: Greene

Slope Class: C Hydrologic Group: C

Riparian buffer width: 0 ft

Distance to stream: 0 ft

Conservation Practices:

Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K		Lab
Fa-2017	6.9	H(81 P ppm)	M(90 K ppm)	A&L MIII	

Soils:

PERCENT	SYMBOL	SOIL SERIES
9	CgB	Chatuge
11	EIB	Elioak
40	EIC	Elioak
6	EnD3	Elioak
1	GIC	Glenelg
30	GID	Glenelg
3	HxD	Hazel

Field Warnings:

Environmentally Sensitive Soils due to:

Shallow soils less than 41 inches deep likely to be located over fractured or limestone bedrock

Soils with perent slope in excess of 15%

Tract Name: 368

FSA Number: 368

Location: Greene

Field Name: GRRLD 12

Total Acres: 23.40 Usable Acres: 23.40

FSA Number: 3, 6, 7, 9

Tract: 368

Location: Greene

Slope Class: C Hydrologic Group: D

Riparian buffer width: 0 ft

Distance to stream: 0 ft

Conservation Practices:

Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K		Lab
Fa-2017	6.5	H(71 P ppm)	H(148 K ppm)	A&L MIII	

Soils:

PERCENT	SYMBOL	SOIL SERIES
17	CgB	Chatuge
14	EIB	Elioak

69 EIC Elioak

Field Warnings:

Field Name: GRRLD 13

Total Acres: 6.00 Usable Acres: 6.00

FSA Number: 8

Tract: 368

Location: Greene

Slope Class: B Hydrologic Group: D

Riparian buffer width: 0 ft

Distance to stream: 0 ft

Conservation Practices:

Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K		Lab
Fa-2017	6.3	H-(60 P ppm)	M+(107 K ppm)	A&L MIII	

Soils:

PERCENT	SYMBOL	SOIL SERIES
64	EIB	Elioak
36	CgB	Chatuge

Field Warnings:

Field Name: GRRLD 14

Total Acres: 14.60 Usable Acres: 14.60

FSA Number: 5

Tract: 368

Location: Greene

Slope Class: C Hydrologic Group: D

Riparian buffer width: 0 ft
Distance to stream: 0 ft

Conservation Practices:
Pasture (>75% cover)

P-Index Summary
N-based
Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K		Lab
Fa-2017	6.6	H+(102 P ppm)	L+(42 K ppm)	A&L MIII	

Soils:

PERCENT	SYMBOL	SOIL SERIES
2	CgB	Chatuge
93	EIC	Elioak
5	Sc	Codorus Suches

Field Warnings:

Field Name: GRRLD 15
Total Acres: 27.70 Usable Acres: 27.70
FSA Number: 1, 2
Tract: 368
Location: Greene
Slope Class: C Hydrologic Group: D

Riparian buffer width: 0 ft
Distance to stream: 0 ft

Conservation Practices:
Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K		Lab
Fa-2017	6.2	H(97 P ppm)	H(190 K ppm)	A&L MIII	

Soils:

PERCENT	SYMBOL	SOIL SERIES
12	CgB	Chatuge
11	EIB	Elioak
77	EIC	Elioak

Field Warnings:

Tract Name: 439

FSA Number: 439

Location: Greene

Field Name: GRRLD 11

Total Acres: 9.50 Usable Acres: 9.50

FSA Number: 1

Tract: 439

Location: Greene

Slope Class: C Hydrologic Group: D

Riparian buffer width: 0 ft

Distance to stream: 0 ft

Conservation Practices:

Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K		Lab
------	----	---	---	--	-----

Fa-2017 6.4 H(87 P ppm) L+(45 K ppm) A&L MIII

Soils:

PERCENT	SYMBOL	SOIL SERIES
19	EIB	Elioak
50	EnC3	Elioak
13	Hb	Hatboro
17	MvB	Meadowville

Field Warnings:

Tract Name: 440

FSA Number: 440

Location: Greene

Field Name: GRRLD 5

Total Acres: 17.00 Usable Acres: 17.00

FSA Number: 5, 6

Tract: 440

Location: Greene

Slope Class: C Hydrologic Group: D

Riparian buffer width: 0 ft

Distance to stream: 0 ft

Conservation Practices:

Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K		Lab
Fa-2017	6.6	H+(124 P ppm)	L(36 K ppm)	A&L MIII	

Soils:

PERCENT	SYMBOL	SOIL SERIES
37	EIB	Elioak
54	EnC3	Elioak
9	Hb	Hatboro

Field Warnings:

Field Name: GRRLD 6

Total Acres: 15.80 Usable Acres: 15.80

FSA Number: 7

Tract: 440

Location: Greene

Slope Class: C Hydrologic Group: D

Riparian buffer width: 0 ft

Distance to stream: 0 ft

Conservation Practices:

Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K		Lab
Fa-2017	6.8	H(97 P ppm)	L(38 K ppm)	A&L MIII	

Soils:

PERCENT	SYMBOL	SOIL SERIES
12	EIB	Elioak
65	EnC3	Elioak
8	Hb	Hatboro
16	MvB	Meadowville

Field Warnings:

Field Name: GRRLD 7

Total Acres: 11.50 Usable Acres: 11.50
FSA Number: 8, 9
Tract: 440
Location: Greene
Slope Class: C Hydrologic Group: D

Riparian buffer width: 0 ft
Distance to stream: 0 ft

Conservation Practices:

Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K		Lab
Fa-2017	6.4	H-(67 P ppm)	H-(125 K ppm)	A&L MIII	

Soils:

PERCENT	SYMBOL	SOIL SERIES
5	AsC	Ashe
2	EIB	Elioak
48	EnC3	Elioak
23	Hb	Hatboro
22	MvB	Meadowville

Field Warnings:

Field Name: GRRLD 8

Total Acres: 17.40 Usable Acres: 17.40
FSA Number: 3
Tract: 440
Location: Greene
Slope Class: C Hydrologic Group: D

Riparian buffer width: 0 ft
Distance to stream: 0 ft

Conservation Practices:

Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K		Lab
Fa-2017	6.5	H(71 P ppm)	VH(242 K ppm)	A&L MIII	

Soils:

PERCENT	SYMBOL	SOIL SERIES
13	DkB3 Dyke	
66	EnC3 Elioak	
18	Hb Hatboro	
3	MvB Meadowville	

Field Warnings:

Field Name: GRRLD 9

Total Acres: 15.40 Usable Acres: 15.40

FSA Number: 4

Tract: 440

Location: Greene

Slope Class: B Hydrologic Group: C

Riparian buffer width: 0 ft
Distance to stream: 0 ft

Conservation Practices:

Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K		Lab
Fa-2017	6.6	H+(104 P ppm)	H(176 K ppm)	A&L MIII	

Soils:

PERCENT	SYMBOL	SOIL SERIES
38	DkB3	Dyke
35	DkC3	Dyke
2	EnC3	Elioak
15	Hb	Hatboro
11	UnB	Unison

Field Warnings:

Field Name: GRRLD 10

Total Acres: 23.20 Usable Acres: 23.20

FSA Number: 1, 2

Tract: 440

Location: Greene

Slope Class: B Hydrologic Group: C

Riparian buffer width: 0 ft

Distance to stream: 0 ft

Conservation Practices:

Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K		Lab
Fa-2017	6.3	H+(104 P ppm)	L+(42 K ppm)	A&L MIII	

Soils:

PERCENT	SYMBOL	SOIL SERIES
51	DkB3	Dyke
2	EIB	Elioak
15	EnC3	Elioak
3	GIC	Glenelg
3	Hb	Hatboro
25	MvB	Meadowville

Field Warnings:**Tract Name:** None

FSA Number: None

Location: Greene

Field Name: GRRLD 4

Total Acres: 3.00 Usable Acres: 3.00

FSA Number: None

Tract: None

Location: Greene

Slope Class: B Hydrologic Group: D

Riparian buffer width: 0 ft

Distance to stream: 0 ft

Conservation Practices:

Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K		Lab
Fa-2017	6.0	H(87 P ppm)	M-(70 K ppm)	A&L MIII	

Soils:

PERCENT	SYMBOL	SOIL SERIES
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90
10

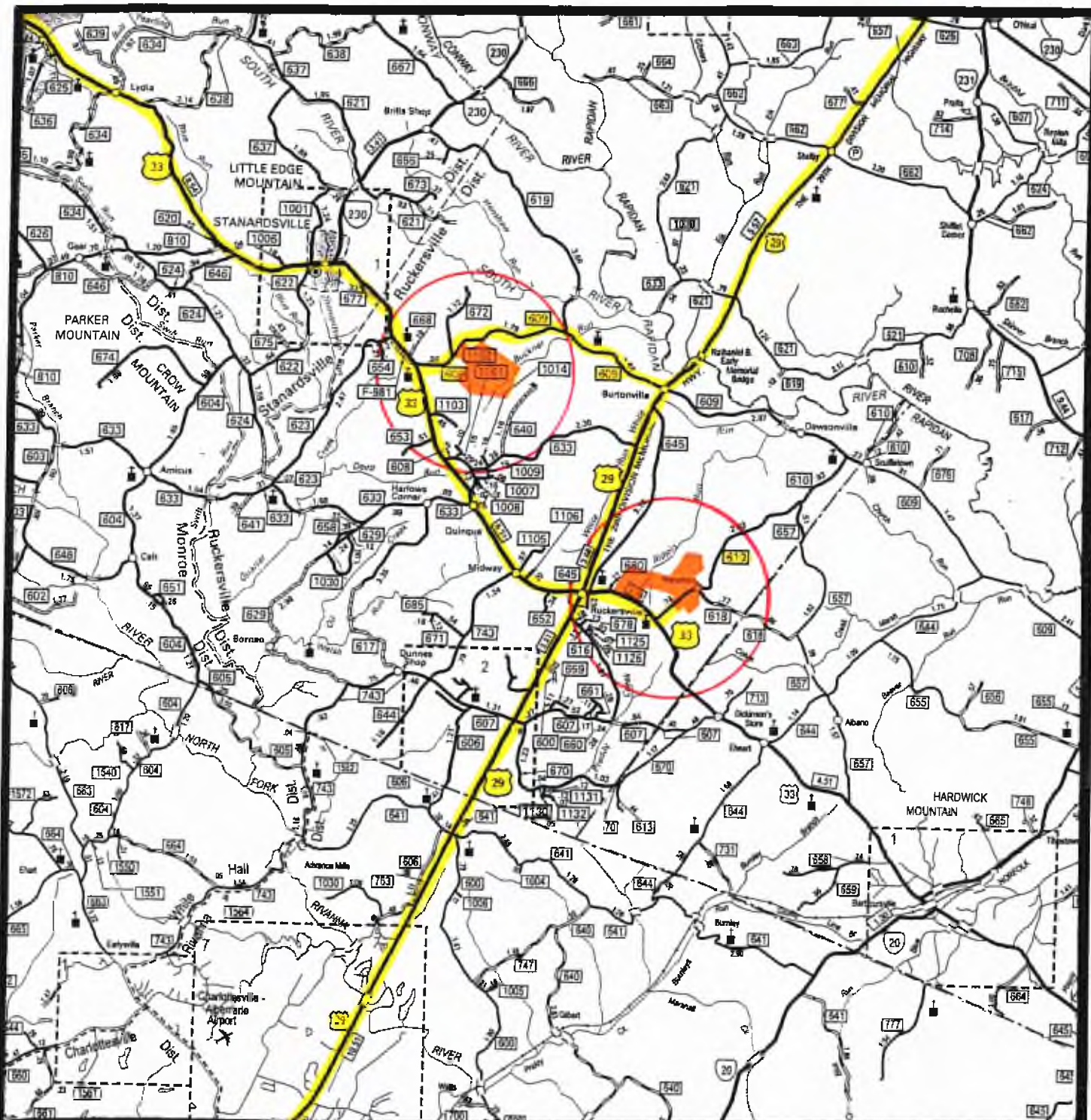
EIB Elioak
EnC3 Elioak

Field Warnings:

MAPS

Recyc SystemsTM Inc.

(Biosolids Land Application)



Scale: 1" = 2 miles

GRRLD 1-15

VICINITY MAP

10-30-17



(Biosolids Land Application)

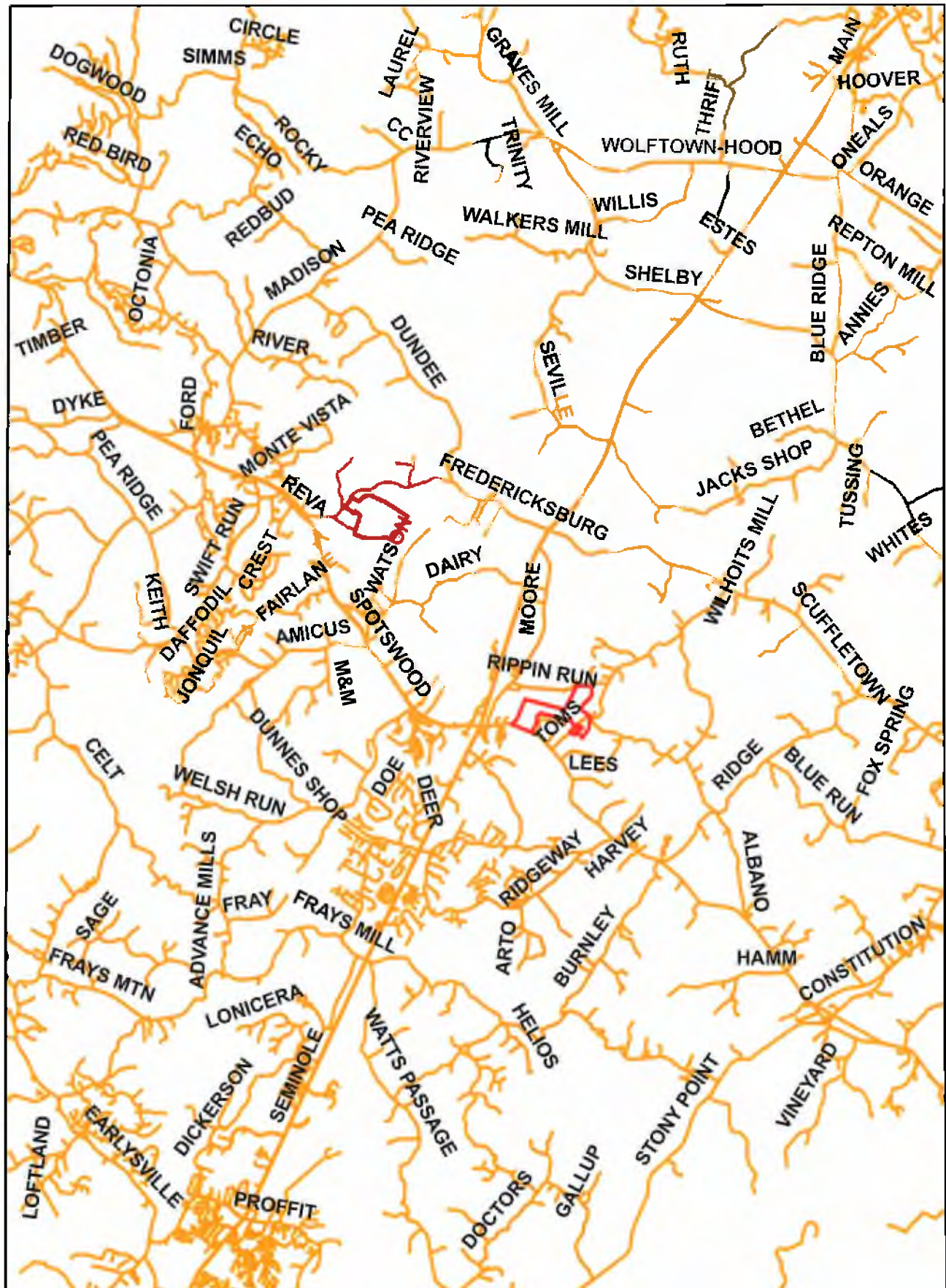


GRRLD 1-15

VICINITY MAP

10-30-17

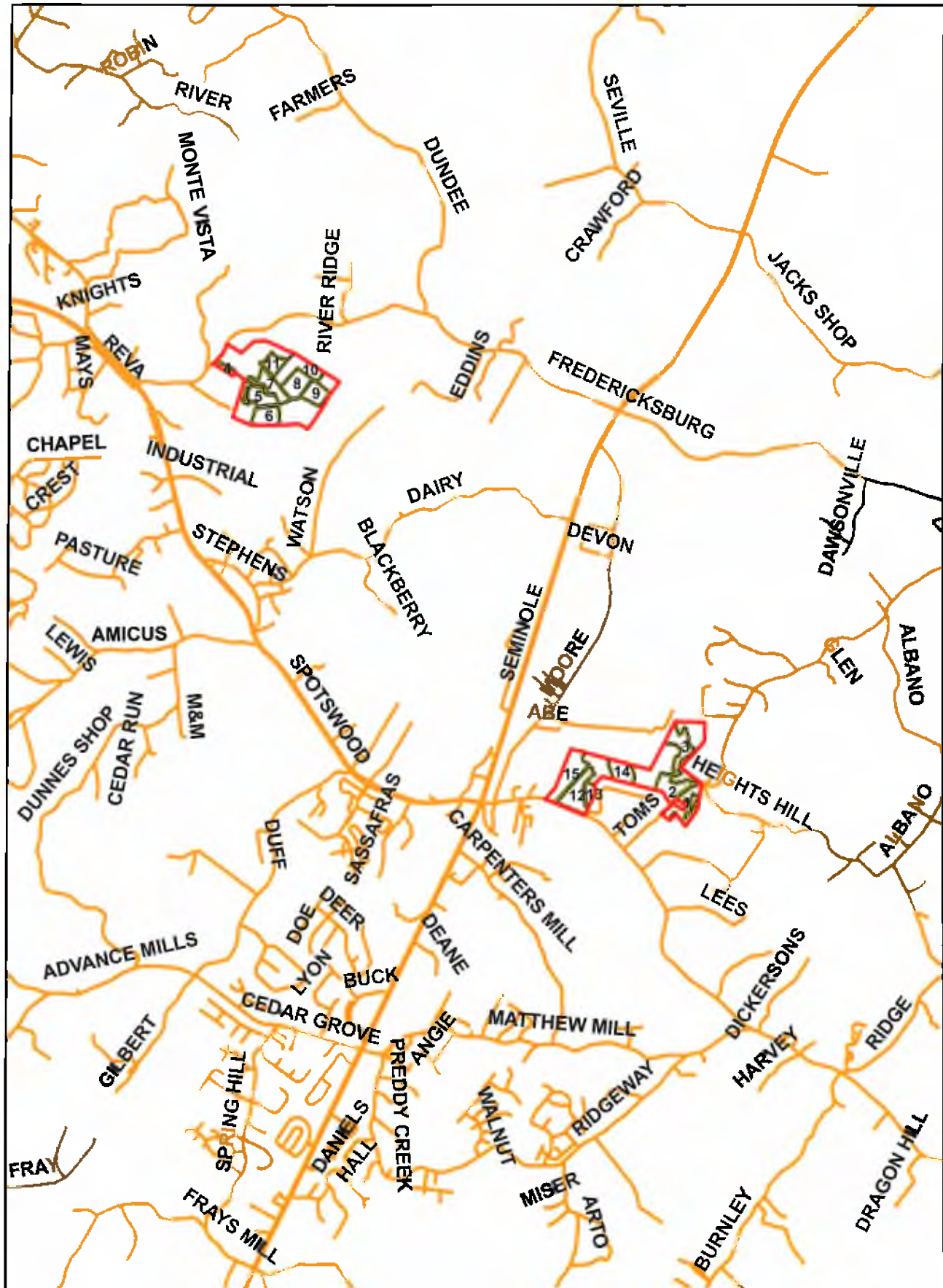




Vicinity Map

10-30-17

1 in = 2 miles



Vicinity Map

10-30-17

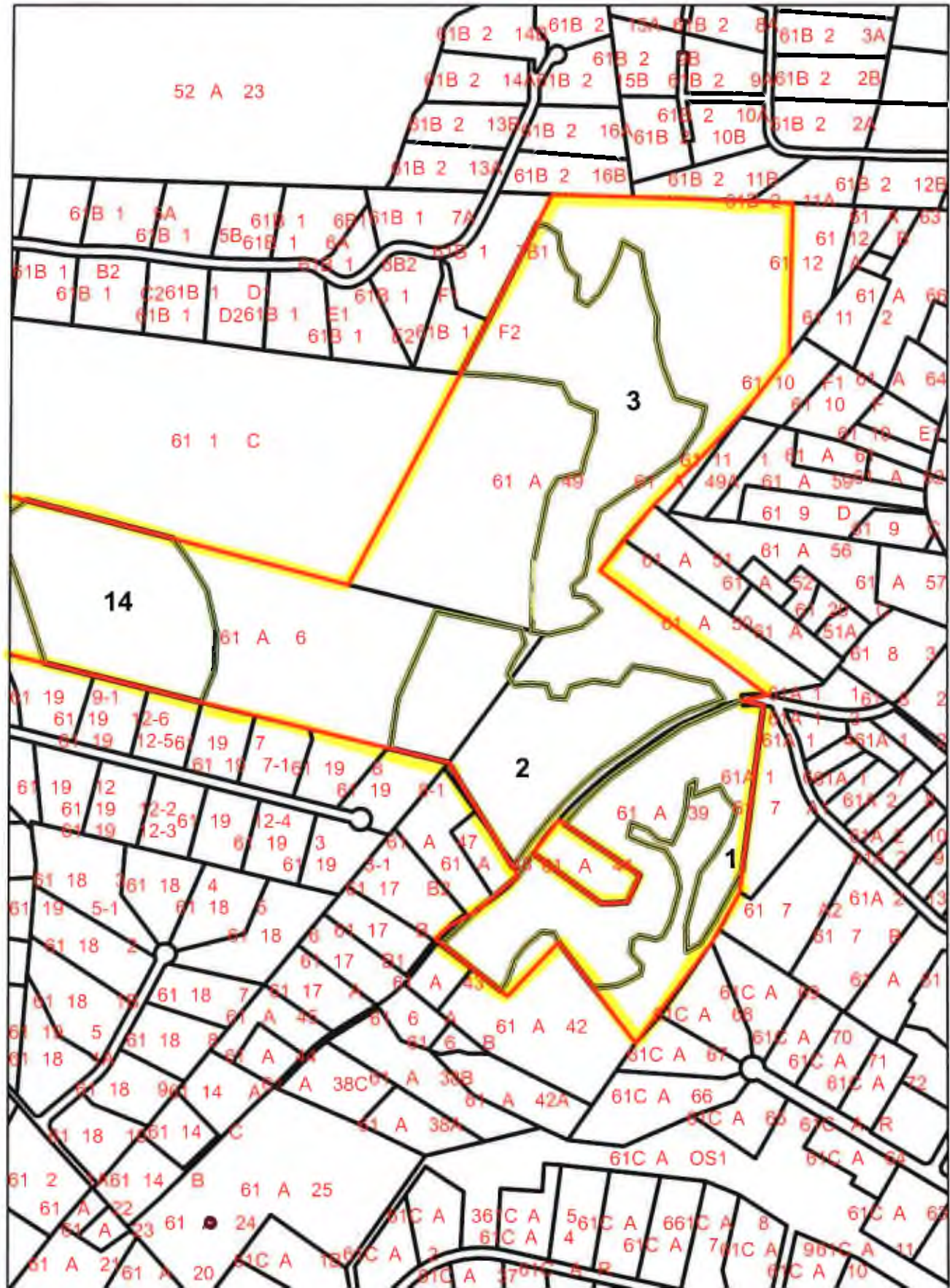
1 in = 1 miles



GRRLD



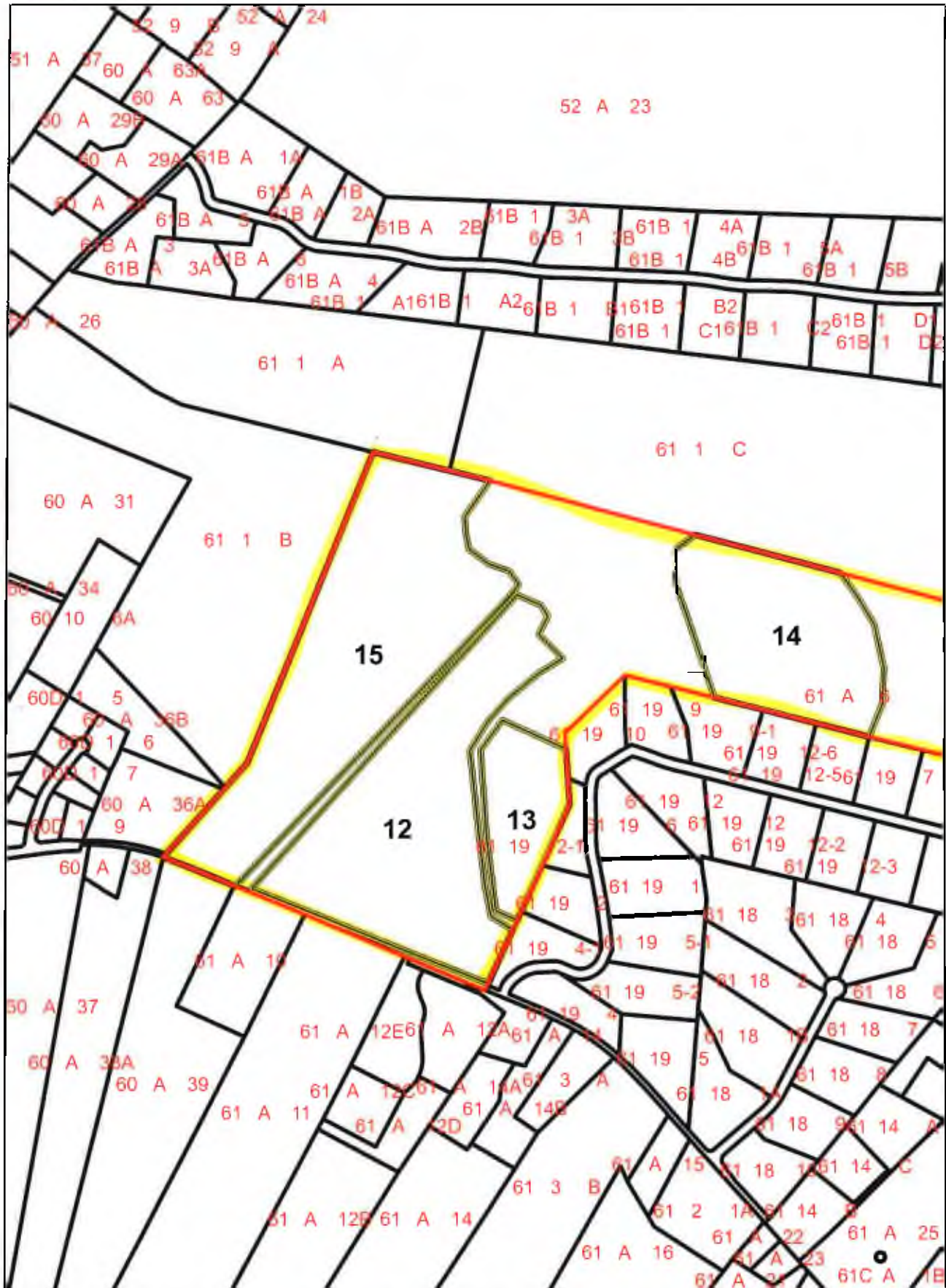
Tax Map



Tax Map

10-30-17

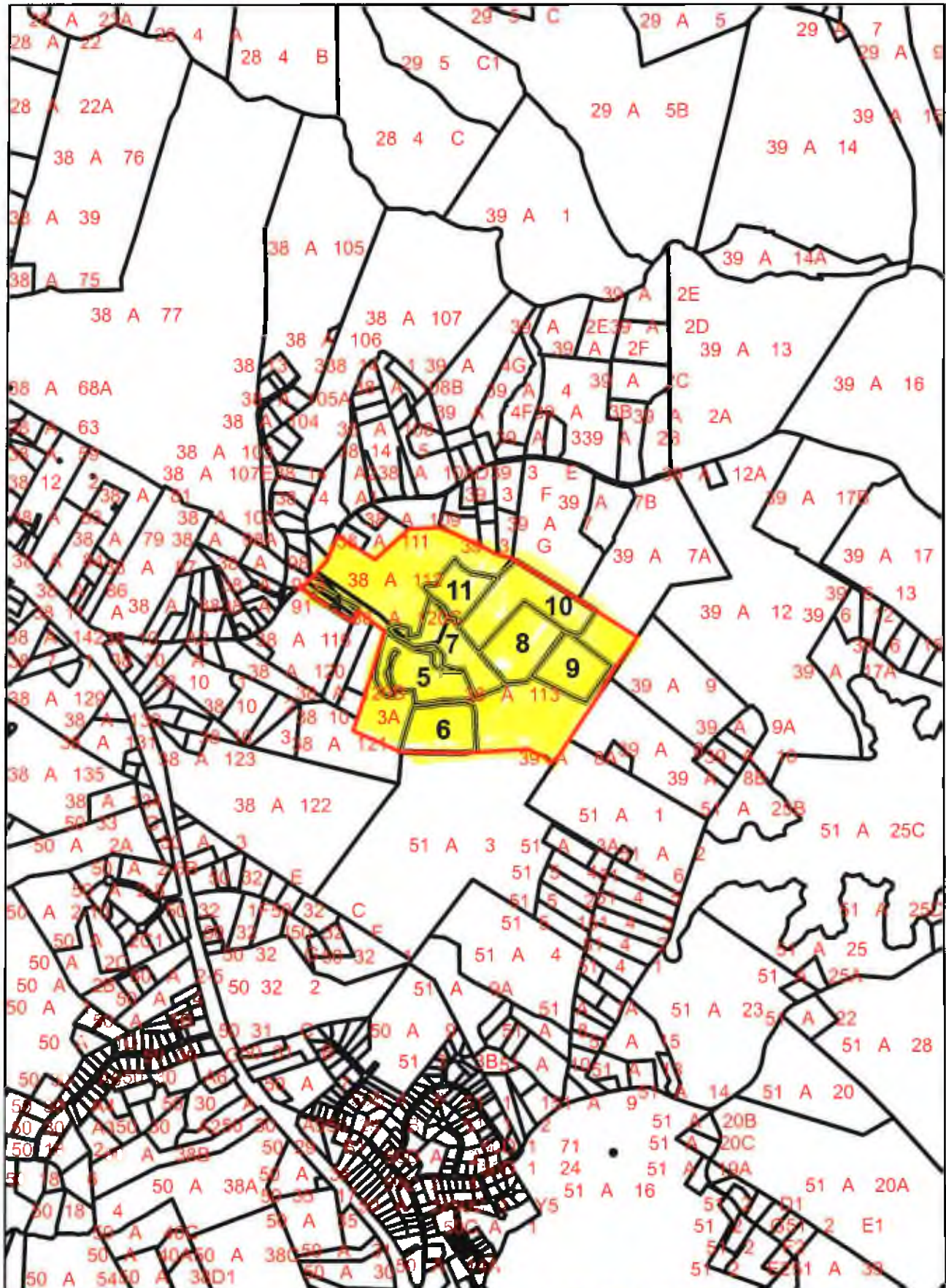
1 in = 660 feet



Tax Map

10-30-17

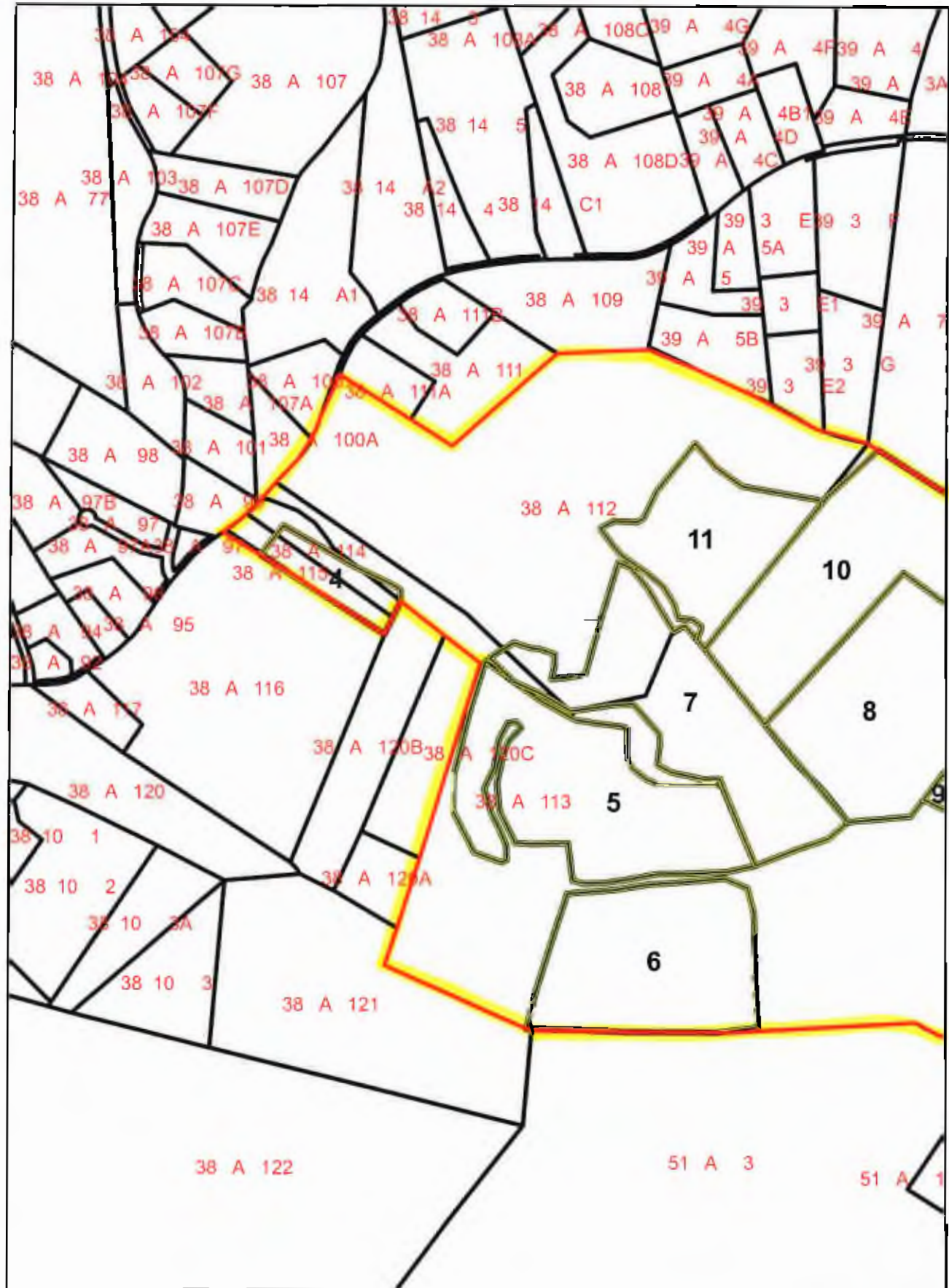
1 in = 660 feet



Tax Map

10-30-17

1 in = 2,000 feet



Tax Map

10-30-17

1 in = 660 feet





Tax Map 10-30-17

1 in = 660 feet



ADJOINING LANDOWNERS

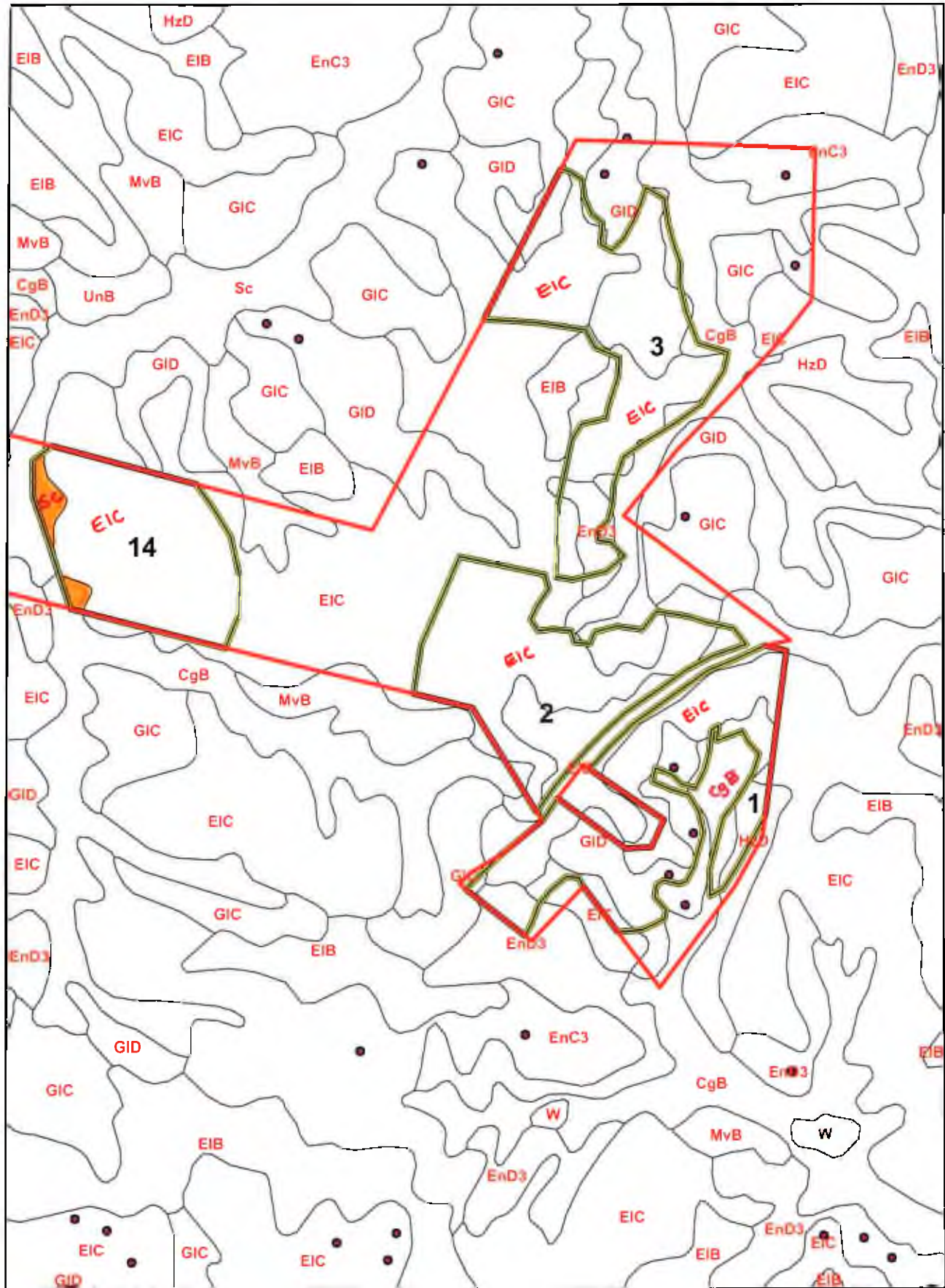
RICHARD L. DURRER

GREENE COUNTY

Tax Map	Parcel #	Owner Name(s)
38	A-99	Joseph O. Wilson IV
	A-100	Lloyd E. and Karen L. Deane
	A-100A	Graydon and Marida Lamb
	102A	Glenn A. and Mindi S. Shifflett
	A-109	Meredith Lee and Mary E. Shifflett
	A-111	Laura M. and James E. Proffitt
	A-111A	David C. Vanderveer
	116	Carl Edward Baugher and Phonephet Boulommavong
	A-120B	Sylvester G. Jr. and Patricia Ann Morris
	A-120C	Sylvester G. Jr. and Patricia Ann Morris
39	A-121	James A. Loder and Jennifer M. Paulson
	A-5B	Dennis James Taylor
	A-7	Henry E. Jr. & Arlene McDaniel
	A-7A	Henry E. Jr. & Arlene McDaniel
	A-8	Anna W. Florence
	A-9	Richard Bruce Jr. and Antonia R. Florence
	3-E2	Bradley W. Morris
51	3-G	Kevin E. Sr. and Margaret C. Thompson
	A-1	Barbara B. and W. Jesse III Nimmo
	A-3	Bobby F. and Joann C. McDaniel
60	A-36A	Ellis Lyle II and Tammy C. Durrer
	A-36B	Richard L. and Marie C. Durrer
	A 38A	Jean Marie Dabney
	A 39	William E. Wright
61	A-10	Alexander B. Dotson
	A-11	Alexander C. Herndon
	A-12A	Susan C. Strickland

Tax Map	Parcel #	Owner Name(s)
61	A-12E	Bryan and Jessica Hoffa
	A-41	Benjamin M. and Suzanne W. Doyle
	A-42	Brian Haygood
	A-43	Ida Jackson and Jean Baker c/o Jean Baker
	A-47	Leroy Jackson
	A-48	Horatio Correll and Yvette Michelle Jackson
	A-50	Webster A. Jefferson
	A-49A	No Data Available
	A-51	Webster A. Jefferson
	A-81A	Sheldon Yoder
	1-A	Glass Living Trust
		Carolyn E. Silman Trustee of the Carolyn E. Silman Revocable
	1-B	Trust
		Glass Living Trust and Carolyn Silman Trustee Carolyn E. Silman
	1-C	Rev Trust
	7-A1	Cornelius and Karen H. Hughston
	7-A2	Cornelius W. Jr. and Karen M. Hughston
	10-F1	Timothy J. Brown
	11-1	William III and Janet Frye
	12-A	Christine Rucker c/o Kabern Frye
	17-B	Newman Properties LLC
	17-B2	Landh Company LLC c/o Ms. Laila B. Bare
	19-2	Lance A. and Jacqueline E. Pickett
	19-2-1	Tilahun M. Goshu and Meseret W. Workelul
	19 -4-1	Landh Company LLC c/o Ms. Laila B. Bare
	19-7	Mark M. and Beth A. Luellen
	19-7-1	Luke F. and Catherine M. Whitebread
	19-8	Sang H. and Inhye Kim Son
	19-8-1	Yong I. and Iryung H. Kim
	19-9	John Wood and Dona Humphries
	19-9-1	Landh Company LLC
	19-10	Jack V. Jr. and Julie L. Cragg
	19-12-5	Ronnie J. and Cynthia Y. Davis
	19-12-6	Derek D. and Brooke D. Nankivell
61A	1-1	Douglas A. and Carolyn F. Gentry
61B	1-7B1	Kenneth Ray and Debra S. Pennington
	1-F2	John E. Robson
	2-11A	Bobby A. Morris and Tina J. Morris

Tax Map	Parcel #	Owner Name(s)
61B	2-11B 2-16B	Gary Wayne and Tracy S. Deane James B. Michael
61C	A-67 A-68	Stephen Birchell Stephen Birchell

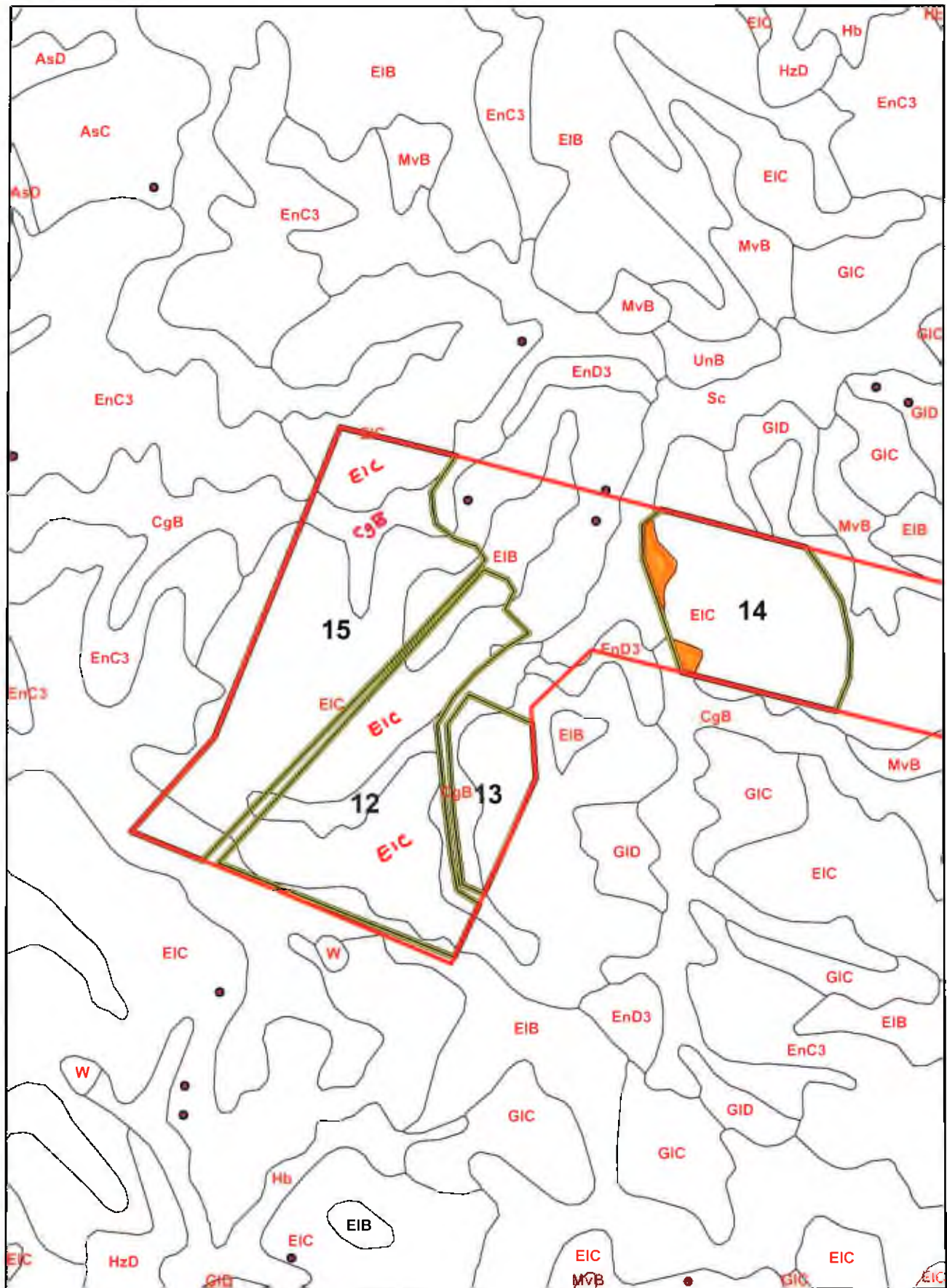


 Frequently Flooded

Soil Map

10.30.17

1 in = 660 feet



Frequently
Flooded

Soil Map

10-30-17

1 in = 660 feet





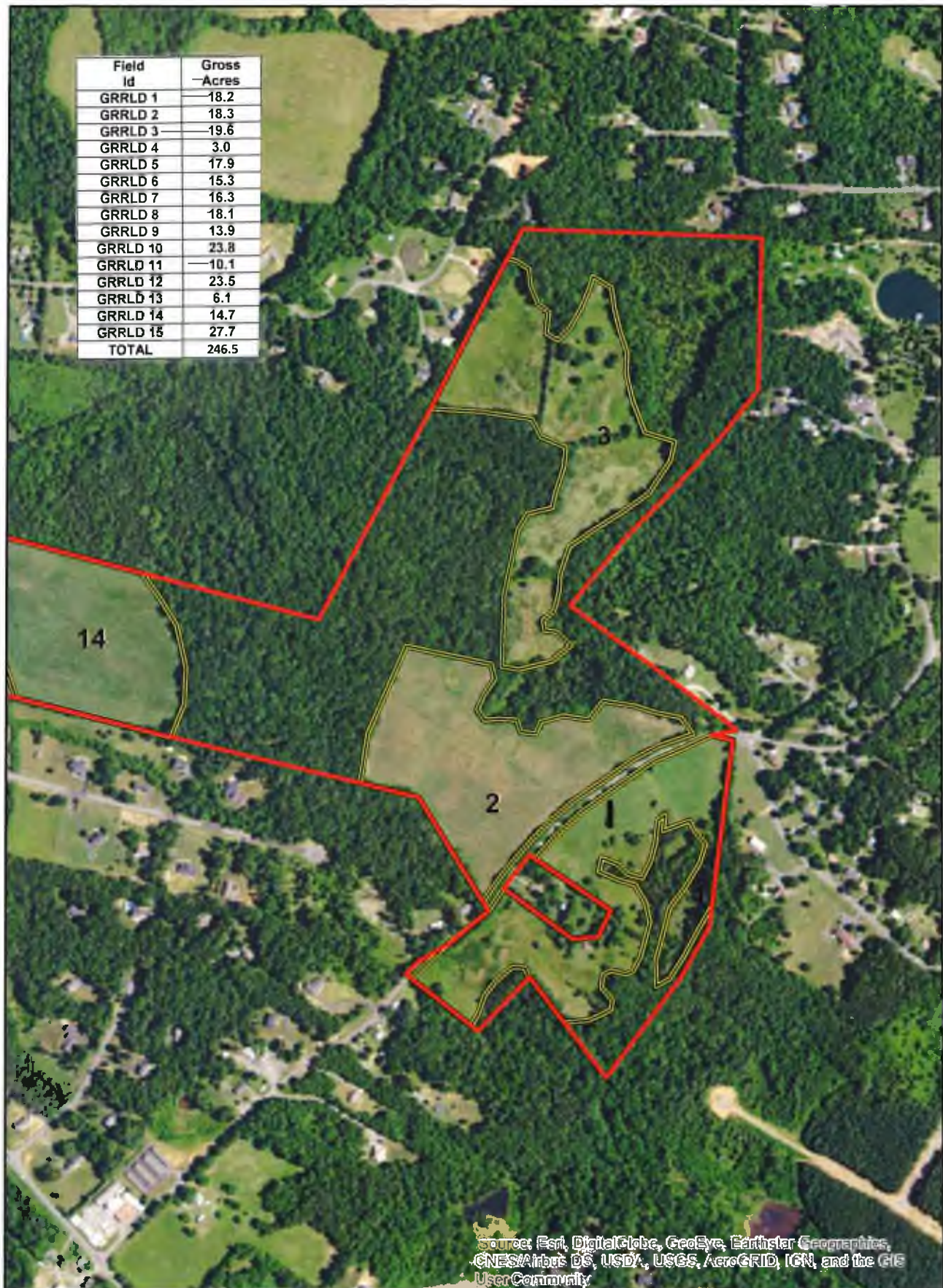
Frequently
Flooded

Soil Map 10-30-17

1 in = 660 feet



Field Id	Gross Acres
GRRLD 1	18.2
GRRLD 2	18.3
GRRLD 3	19.6
GRRLD 4	3.0
GRRLD 5	17.9
GRRLD 6	15.3
GRRLD 7	16.3
GRRLD 8	18.1
GRRLD 9	13.9
GRRLD 10	23.8
GRRLD 11	10.1
GRRLD 12	23.5
GRRLD 13	6.1
GRRLD 14	14.7
GRRLD 15	27.7
TOTAL	246.5



Aerial Map

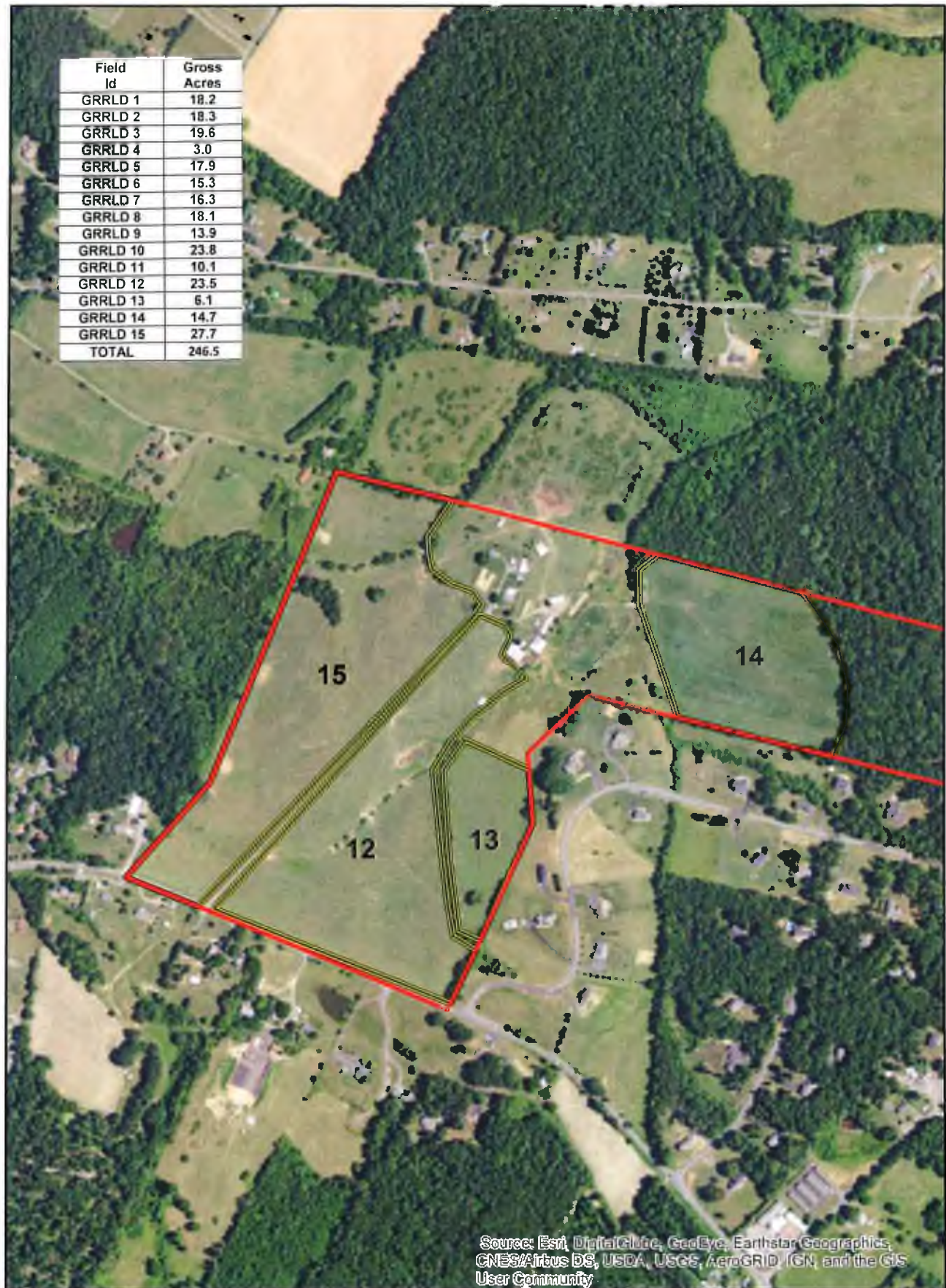
10-30-17

1 in = 660 feet





Field Id	Gross Acres
GRRLD 1	18.2
GRRLD 2	18.3
GRRLD 3	19.6
GRRLD 4	3.0
GRRLD 5	17.9
GRRLD 6	15.3
GRRLD 7	16.3
GRRLD 8	18.1
GRRLD 9	13.9
GRRLD 10	23.8
GRRLD 11	10.1
GRRLD 12	23.5
GRRLD 13	6.1
GRRLD 14	14.7
GRRLD 15	27.7
TOTAL	246.5



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

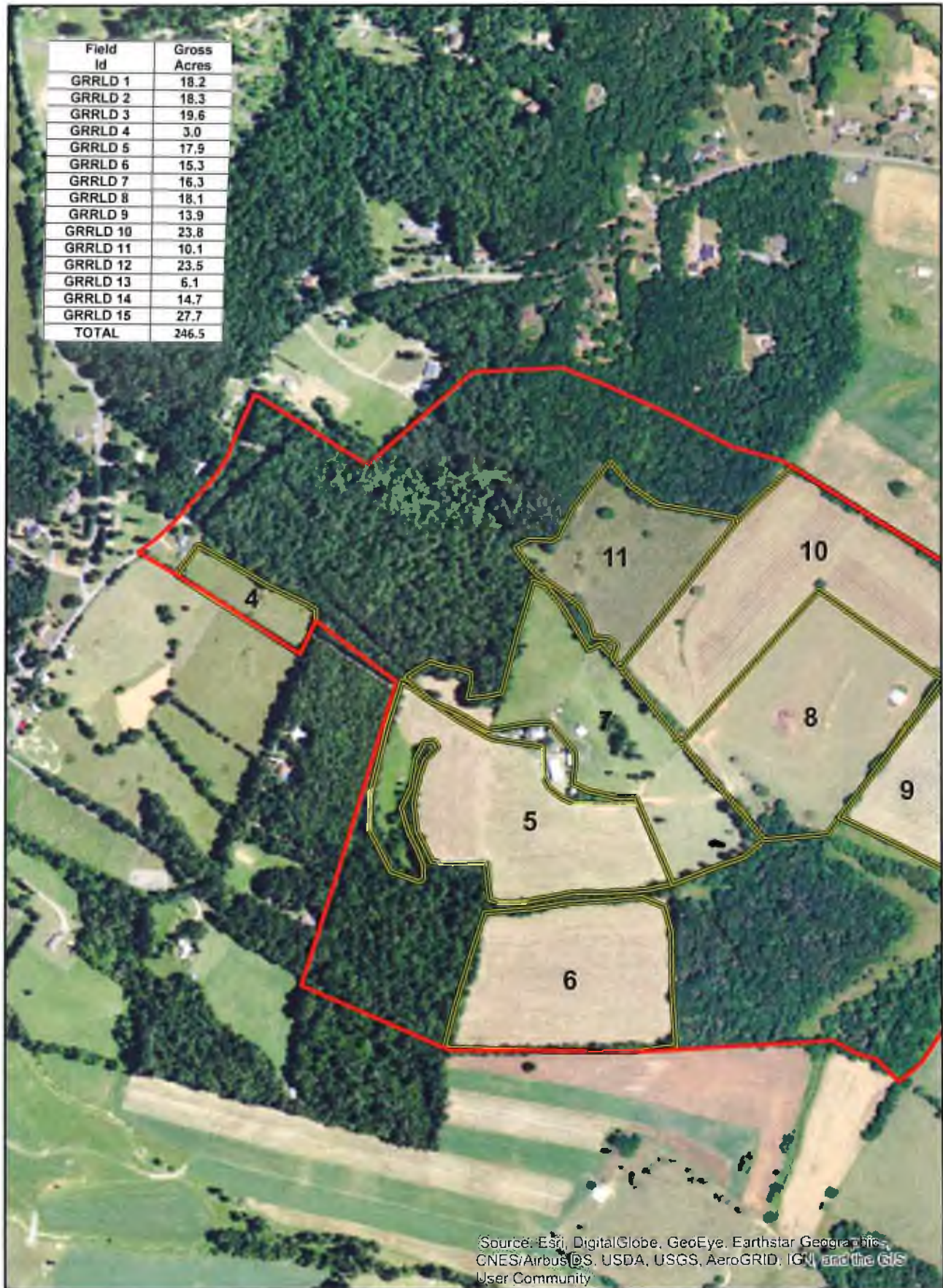


Aerial Map 10-30-17

1 in = 660 feet



Field Id	Gross Acres
GRRLD 1	18.2
GRRLD 2	18.3
GRRLD 3	19.6
GRRLD 4	3.0
GRRLD 5	17.9
GRRLD 6	15.3
GRRLD 7	16.3
GRRLD 8	18.1
GRRLD 9	13.9
GRRLD 10	23.8
GRRLD 11	10.1
GRRLD 12	23.5
GRRLD 13	6.1
GRRLD 14	14.7
GRRLD 15	27.7
TOTAL	246.5



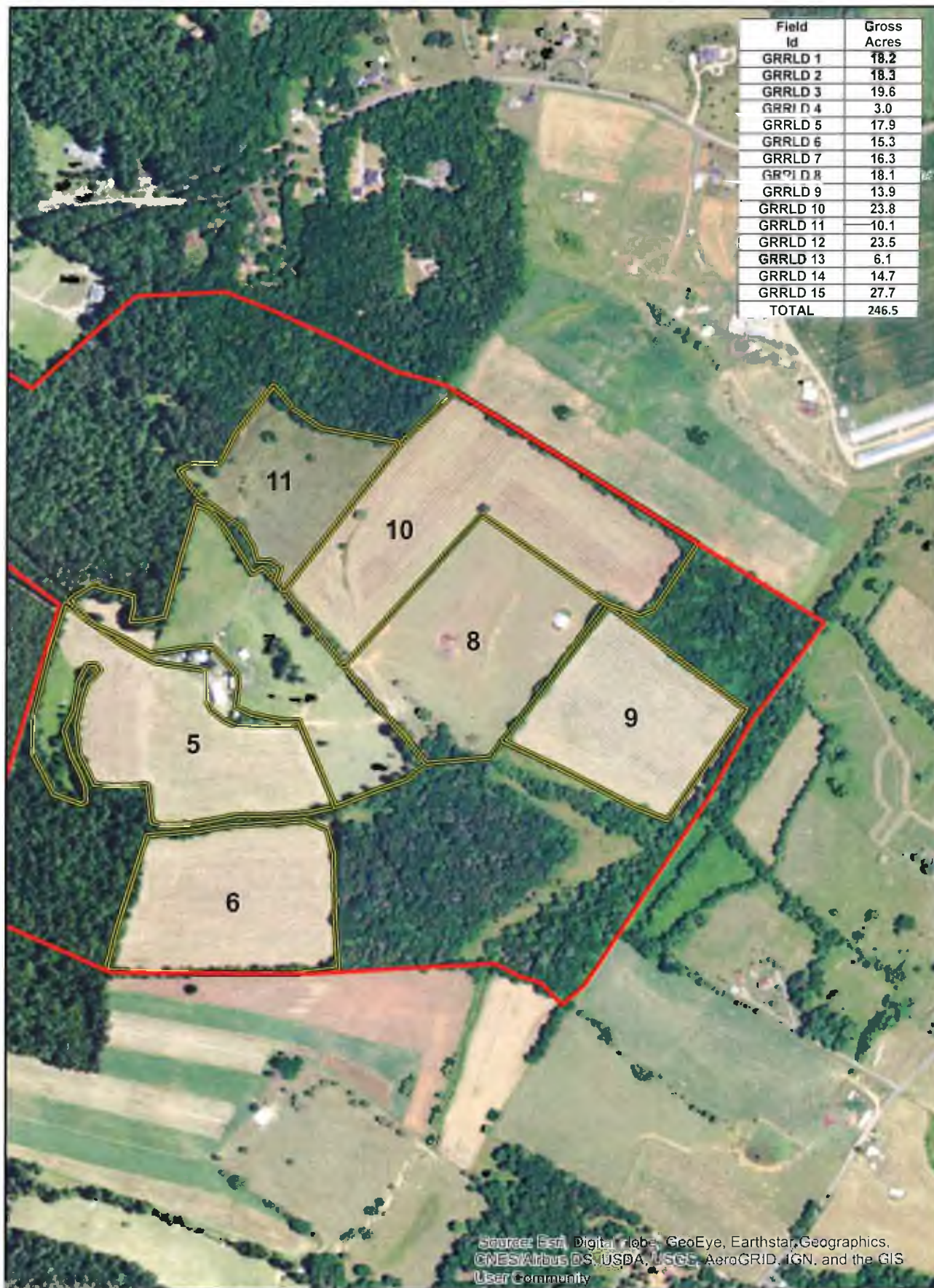
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



Aerial Map

10-30-17

1 in = 660 feet



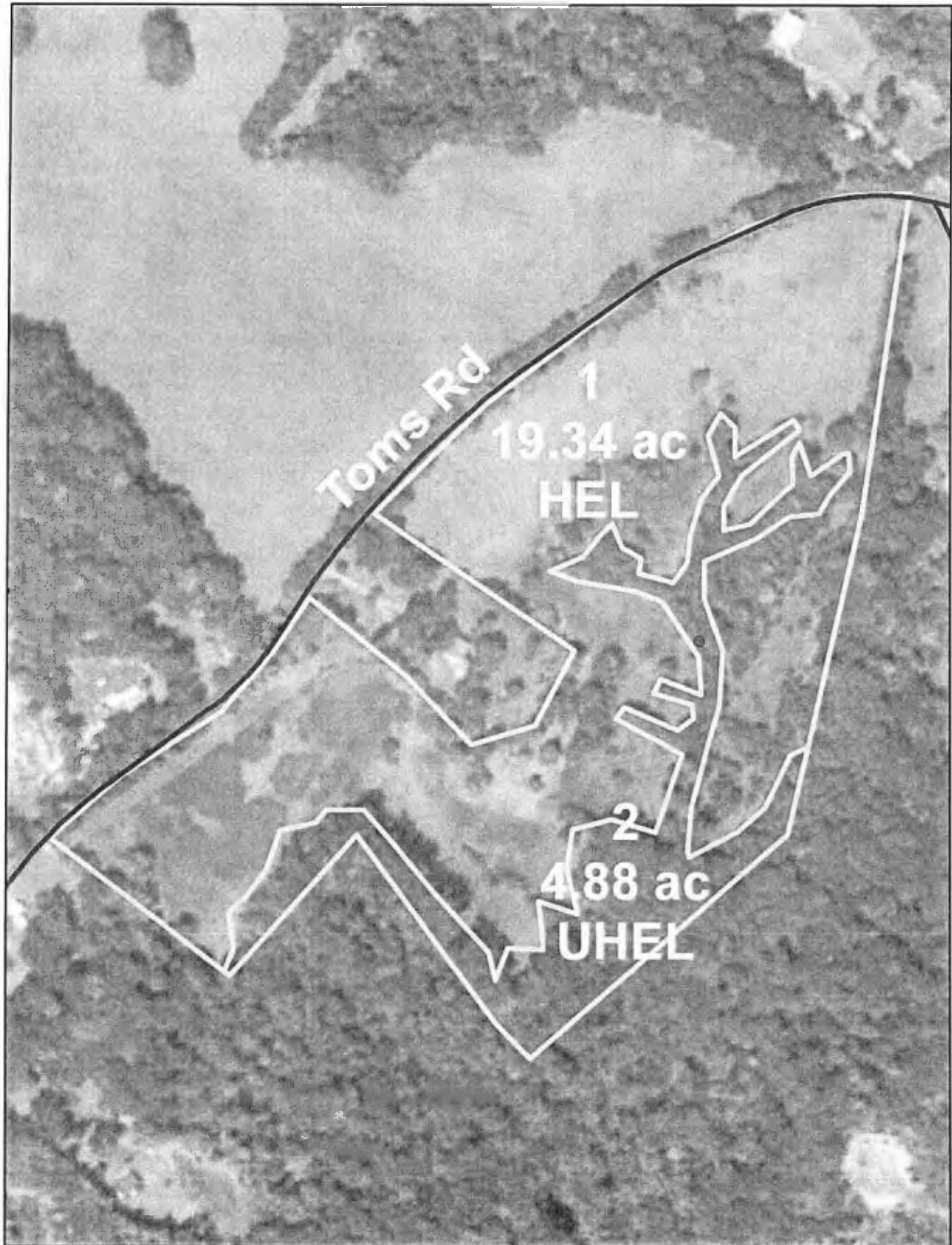
10-30-17

Aerial Map

1 in = 660 feet



UNITED STATES DEPARTMENT OF
AGRICULTURE



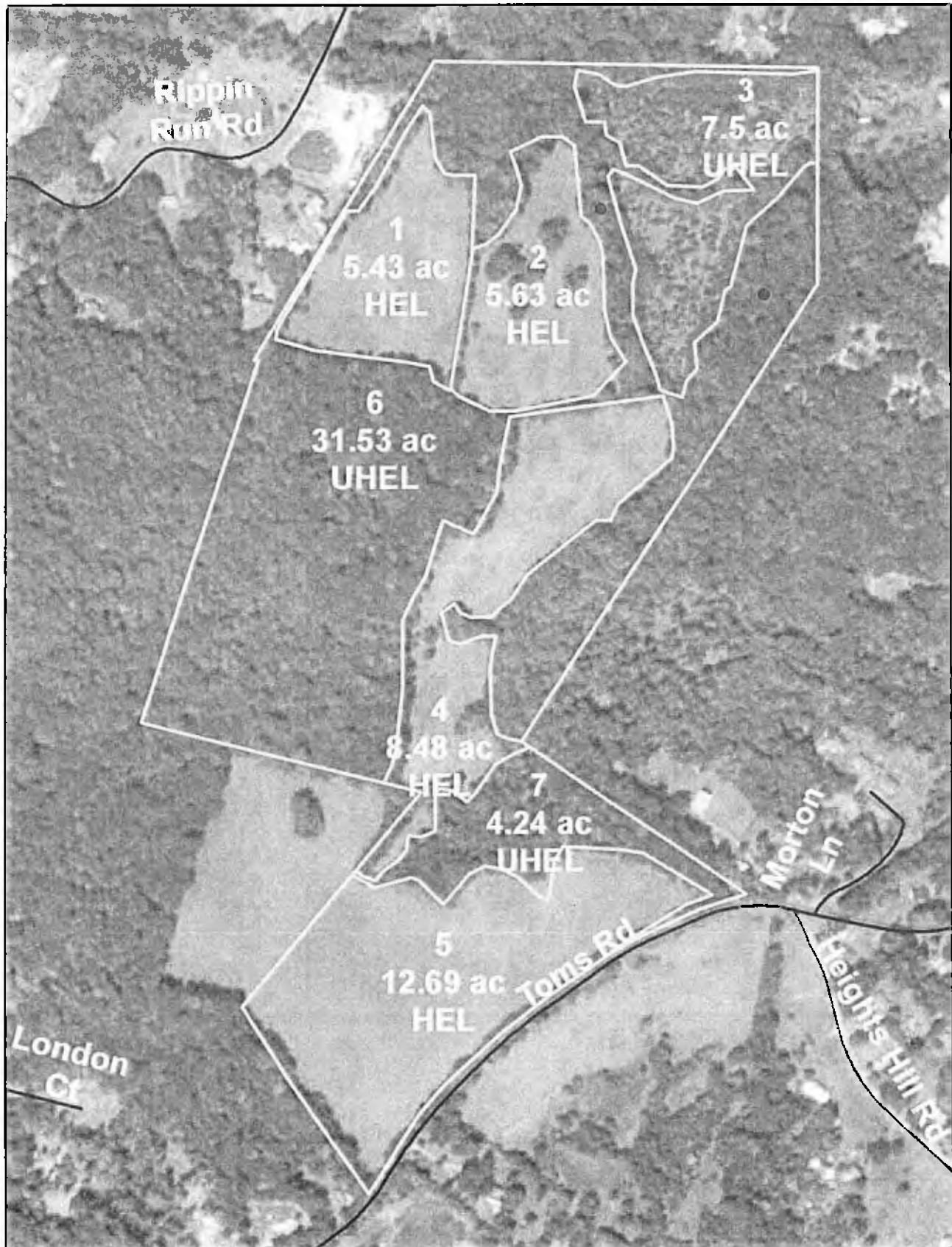
FSN 738 Tract 326
Richard Durrer



Disclaimer: Wetland identifiers do not represent the size, shape or specific determination of the area. Refer to your original determination (CPA-026 and attached maps) for exact wetland boundaries and determinations, or contact NRCS.



UNITED STATES DEPARTMENT OF
AGRICULTURE



FSN 738 Tract 323
Richard Durrer



Disclaimer: Wetland identifiers do not represent the size, shape or specific determination of the area. Refer to your original determination (CPA-026 and attached maps) for exact wetland boundaries and determinations, or contact NRCS.

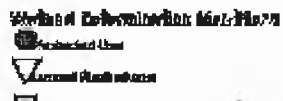


1 inch = 513 feet

Farm: 738
Tract: 368
Richard Durrer



Greene, VA



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September 9, 2016



UNITED STATES DEPARTMENT OF
AGRICULTURE



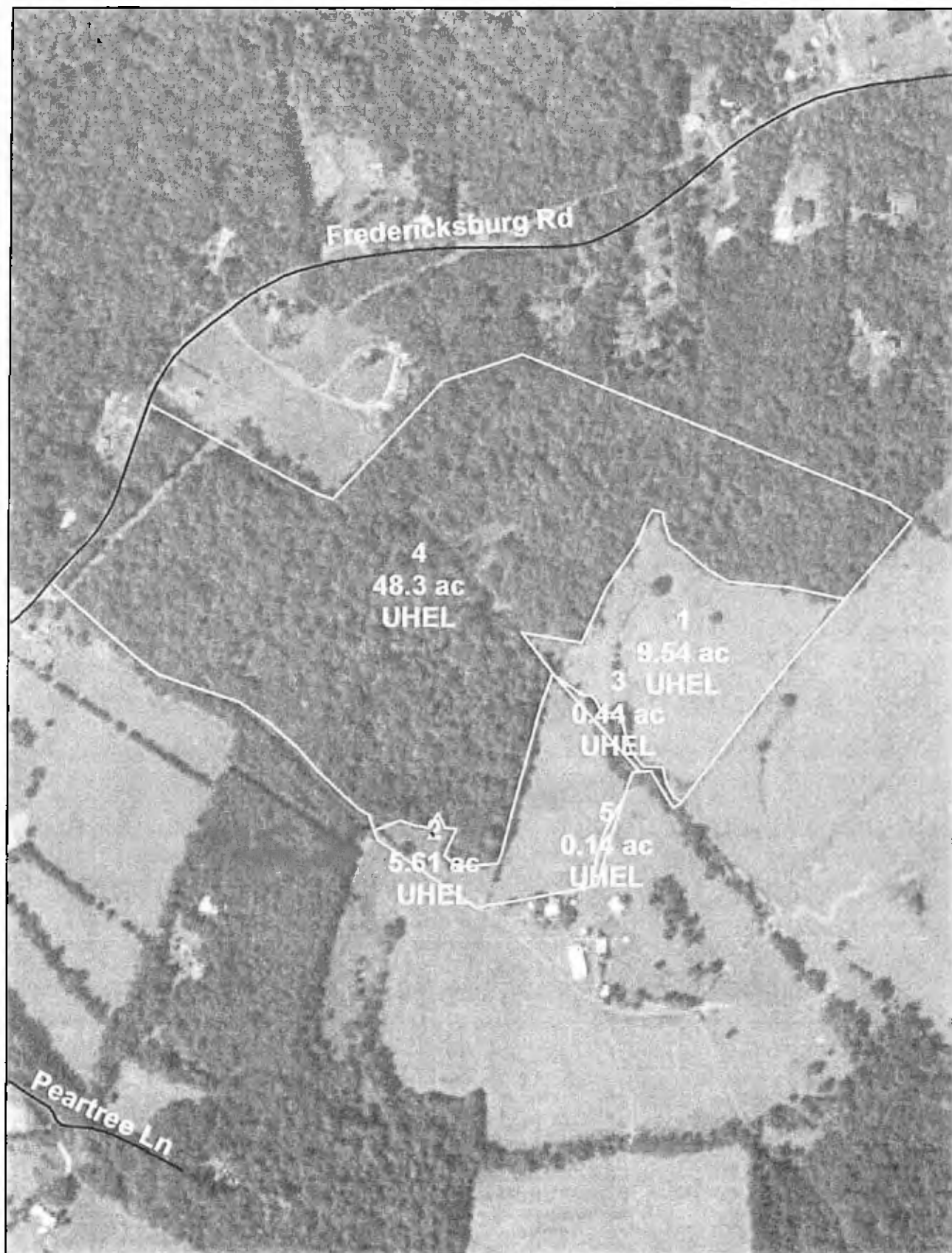
FSN 738 Tract 440
Richard Durrer



Disclaimer: Wetland identifiers do not represent the size, shape or specific determination of the area. Refer to your original determination (CPA-026 and attached maps) for exact wetland boundaries and determinations, or contact NRCS.



UNITED STATES DEPARTMENT OF
AGRICULTURE



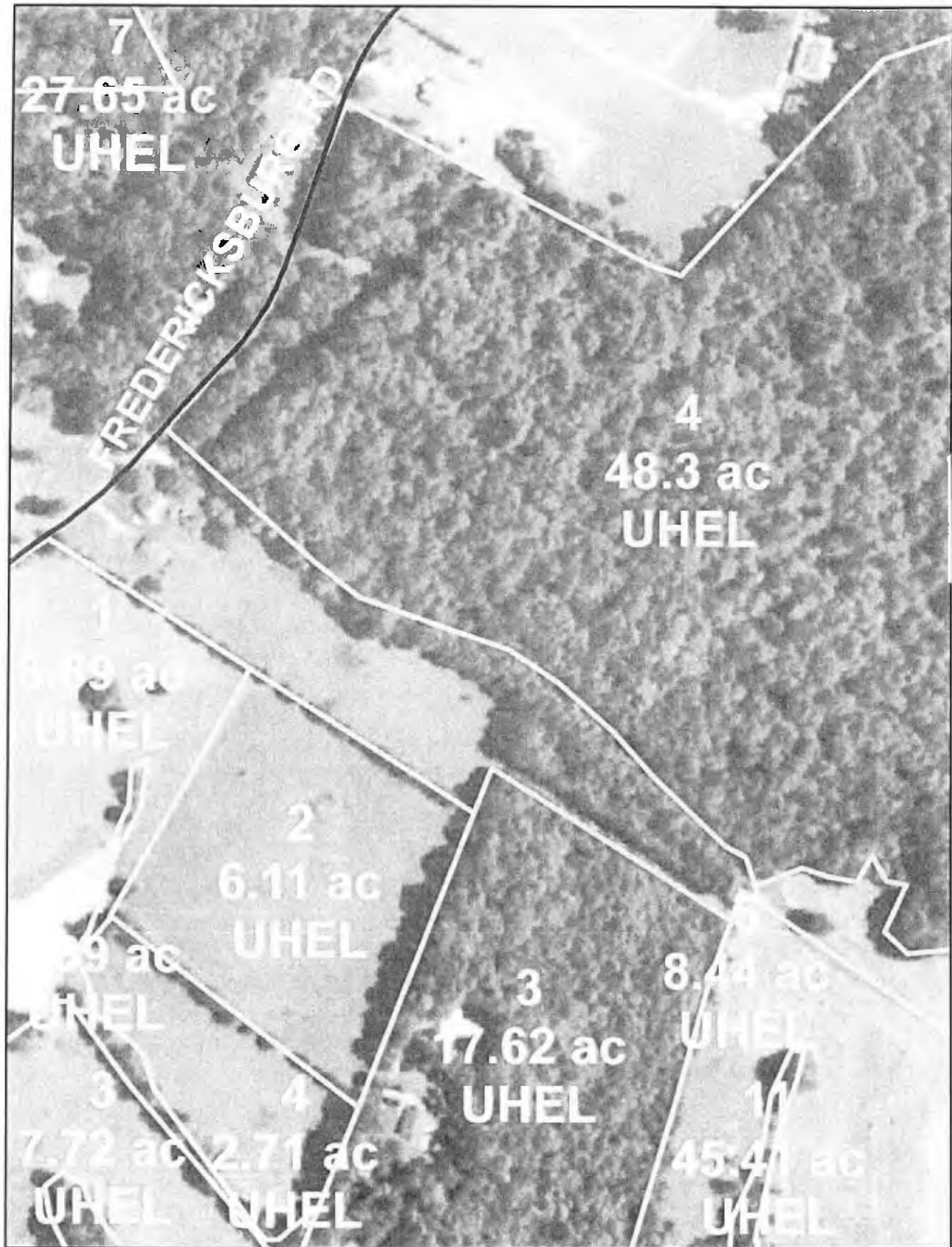
FSN 738 Tract 439
Richard Durrer



Disclaimer: Wetland identifiers do not represent the size, shape or specific determination of the area. Refer to your original determination (CPA-026 and attached maps) for exact wetland boundaries and determinations, or contact NRCS.



UNITED STATES DEPARTMENT OF
AGRICULTURE




0 0.0275 0.055 0.11 Miles

Richard Durrer

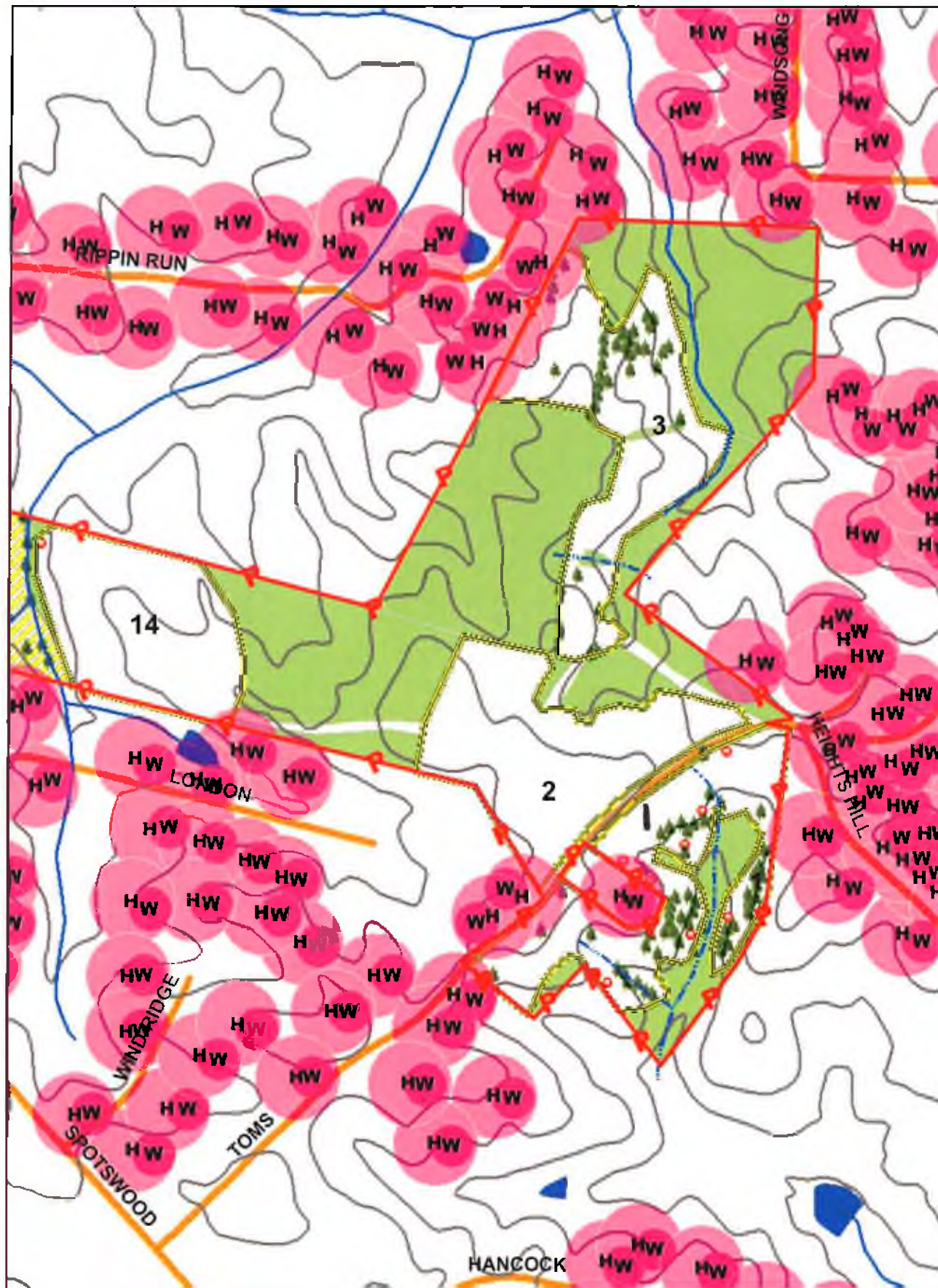


Disclaimer: Wetland identifiers do not represent the size, shape or specific determination of the area. Refer to your original determination (CPA-026 and attached maps) for exact wetland boundaries and determinations, or contact NRCS.

Legend For Site Plan

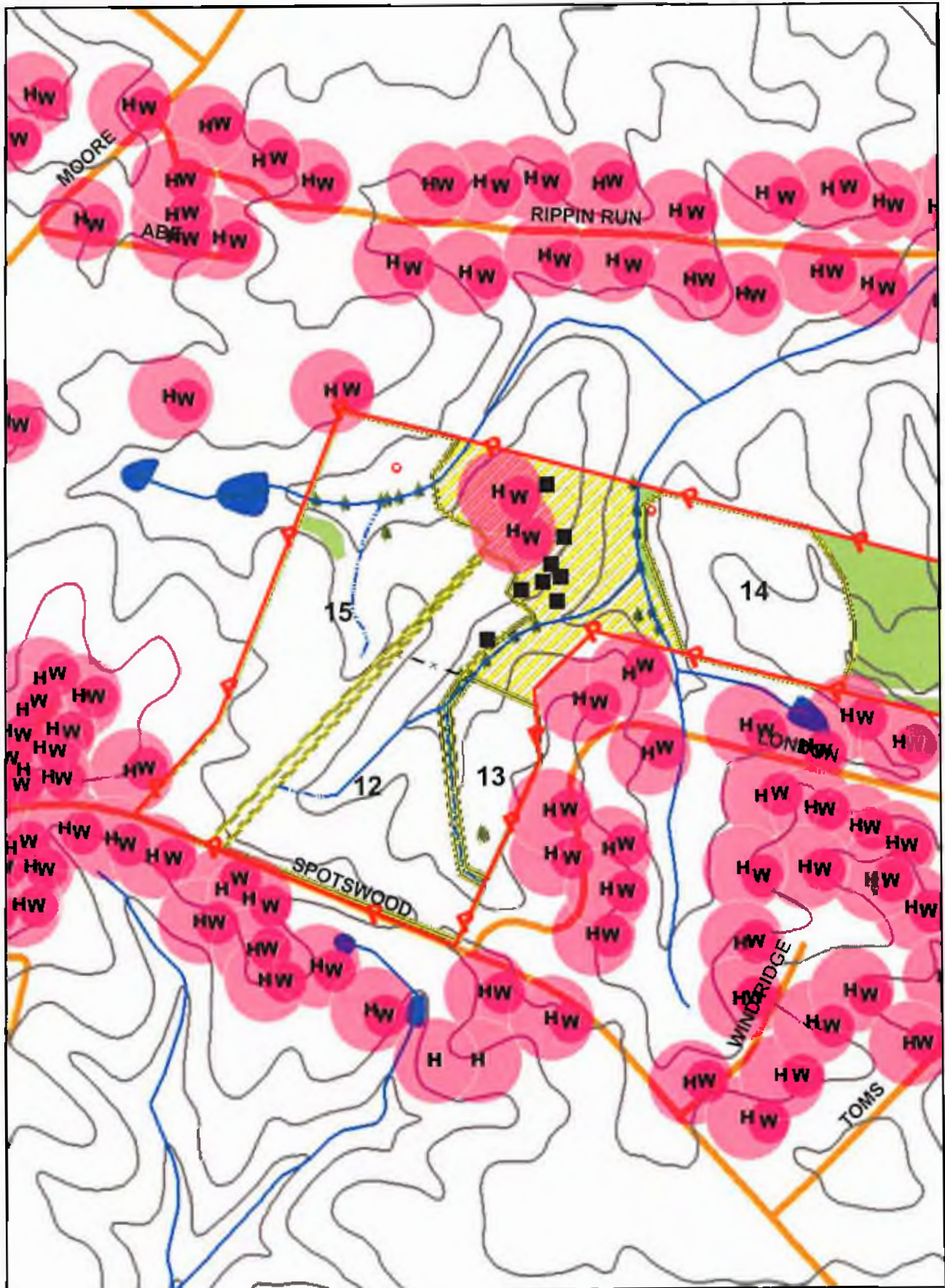
Symbol	Feature	Minimum Setback
	House and Well	200 feet from occupied dwelling * 100 feet from water supply wells or springs
 	Well or Spring	100 feet from water supply wells or springs
	Streams or Surface Water	35 feet with 35 foot vegetated buffer 100 feet without vegetated buffer
	Wet Spot	
	Trees and Woods	
	Private Drive	
	Rock Area/Rock Outcrop	25 feet from rock outcrops 50 feet from limestone rock outcrops
	Severely Eroded Spot	18 Inch minimum depth of soil
  	Sink Hole	100 feet from open sinkholes 50 feet from closed sinkholes
	State Road	10 feet from side of roadway
	Fence / Field Boundary	
	Property Line	100 feet from property line *
 	Slope	15% maximum
	Hashed out Area	No application

*Buffer can be reduced or waived upon written consent from landowner.



Site Plan 10-30-17

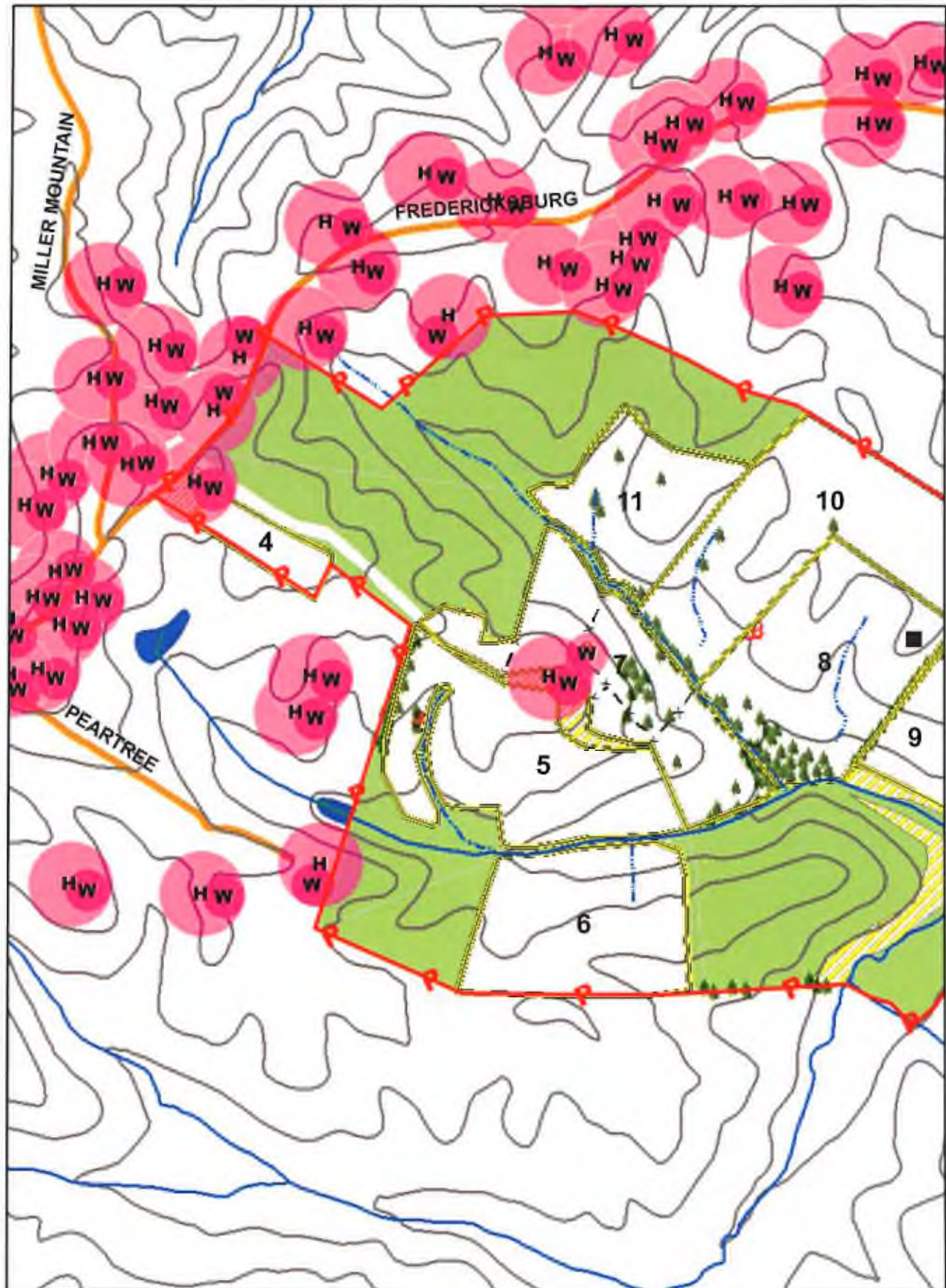
1 in = 660 feet



10-30-17

Site Plan

1 in = 660 feet

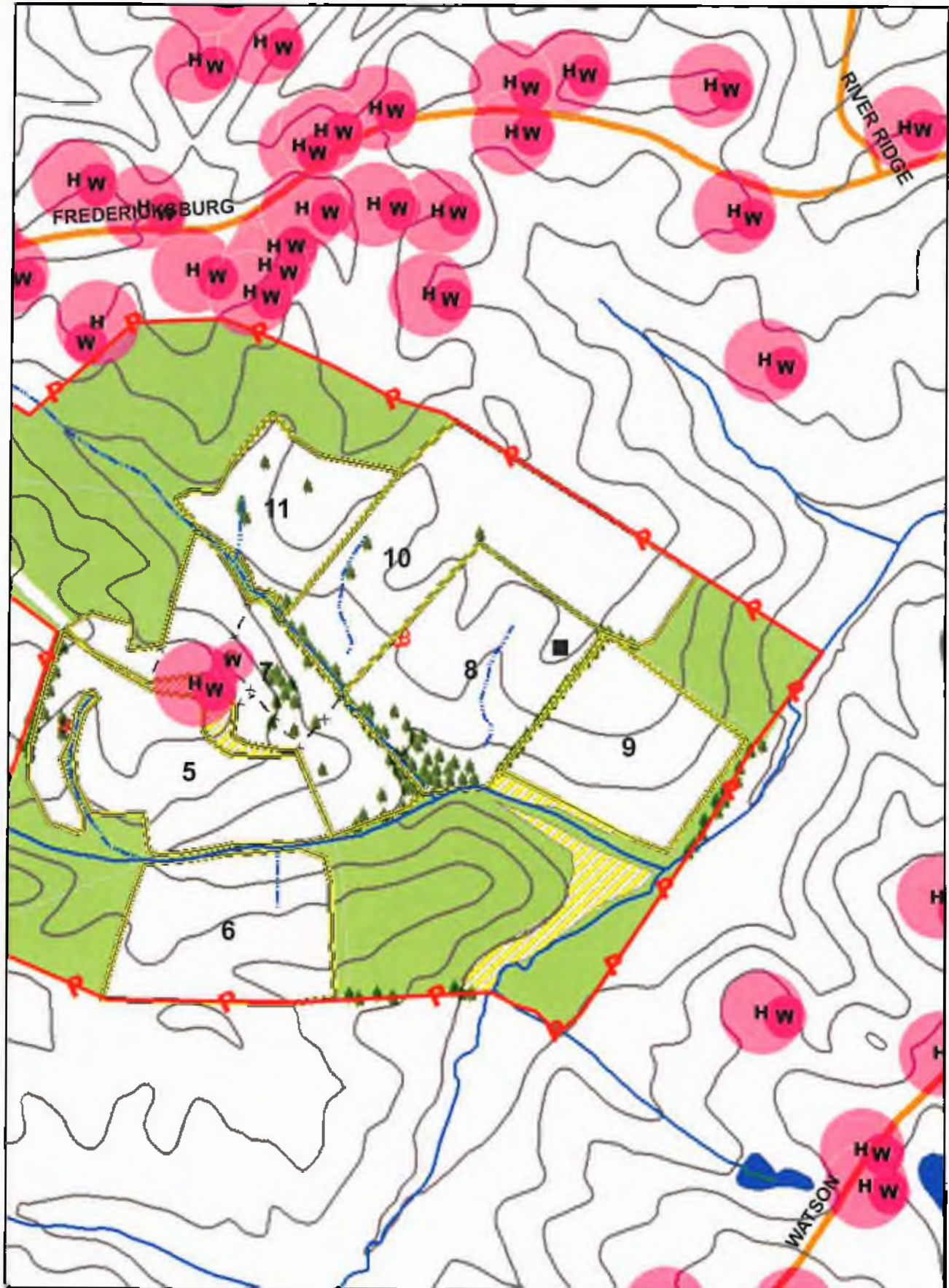


Site Plan

10-30-17

1 in = 660 feet

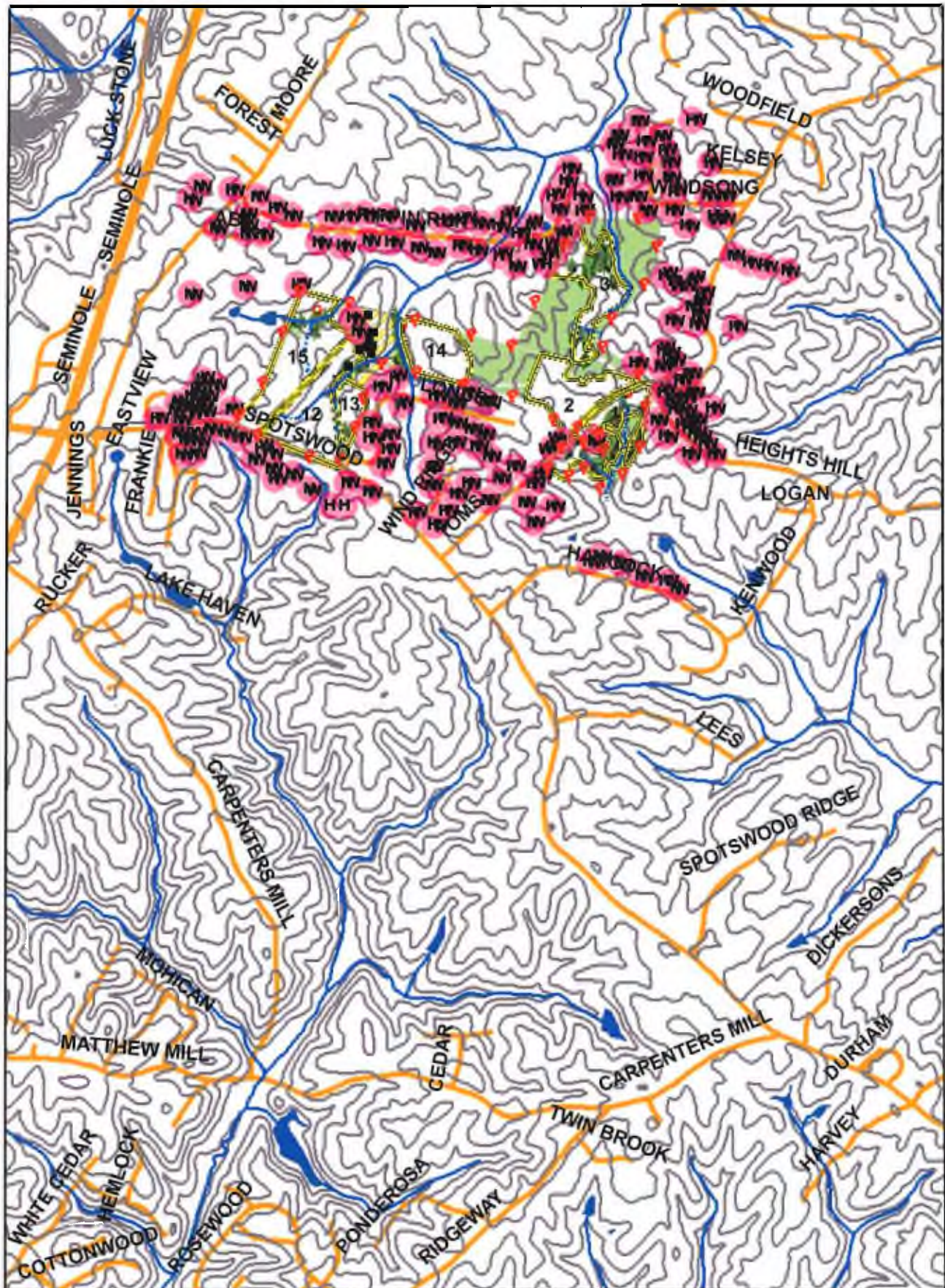




Site Plan 10-30-17

1 in = 660 feet



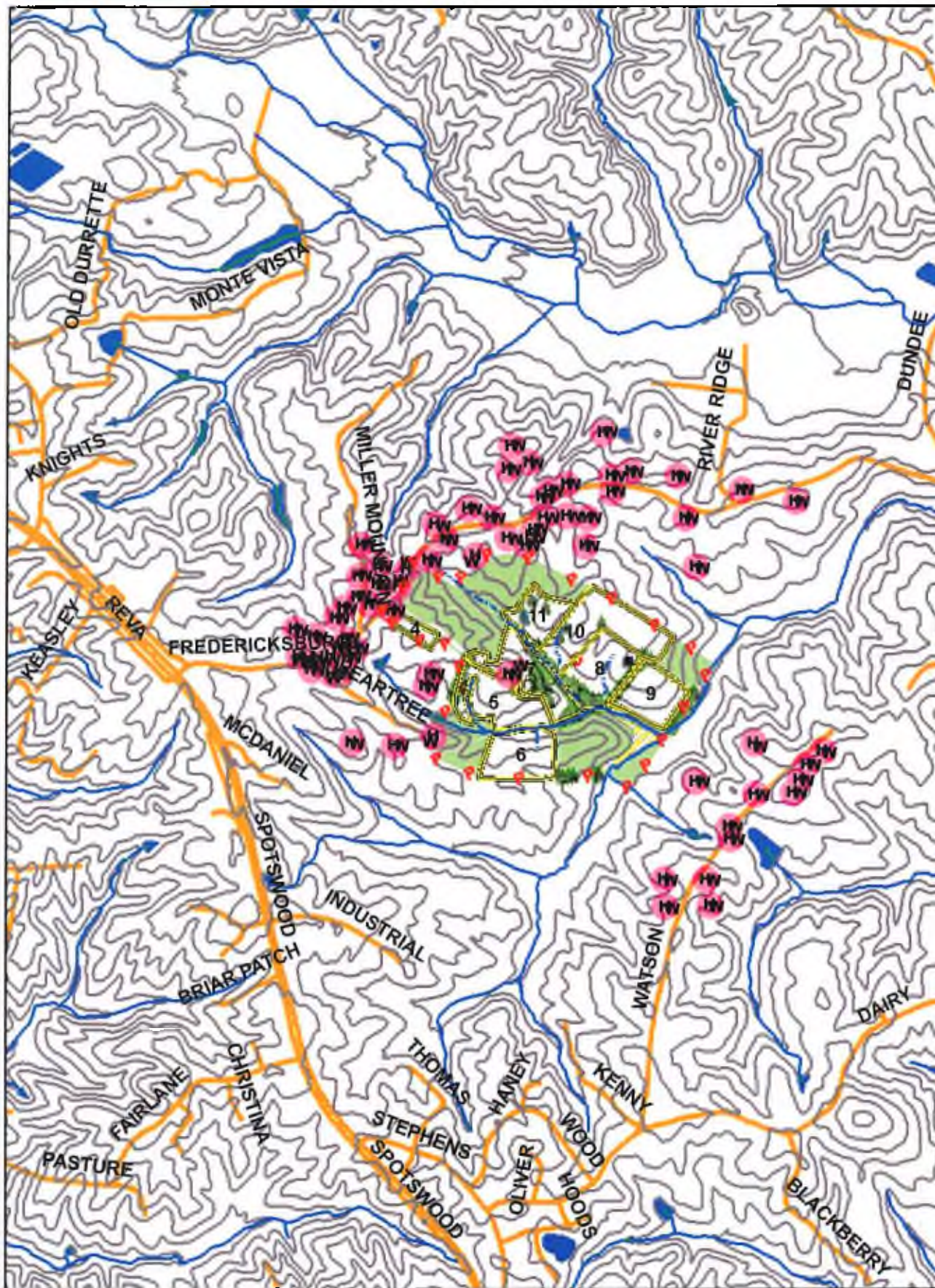


10-30-17

Topographic Map

1 in = 2,000 feet





Topographic Map 10-30-17

1 in = 2,000 feet